PATTERNS OF FAMILY FORMATION

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Declaration

This thesis is entirely my own work.

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ABSTRACT

The aim of the thesis was to examine patterns of family formation; to consider the ways families in one developed country had been built up and the future fertility changes that were anticipated. Interviews were conducted with one hundred and five women, each of whom had just had a second child, and the resulting accounts of their family formation patterns were subjected to a qualitative and quantitative analysis.

Timing to the first child seemed to stem from the couple's view of marriage and the place of children within it. Three constellations of ideas were noted. Firstly, there were those couples (largely working class) who felt children were the primary reason for marriage and, hence, once married, it was best to begin the family as quickly as possible. Secondly, there were those couples (largely middle class) who, though they felt children were essential to a marriage, felt it was more important for newly-married couples to establish themselves financially. These couples tended to wait two or three years before beginning their families. Thirdly, there were those couples who felt children added to a marriage but that they must "fit in" with other arrangements the husband and wife had. These couples were not characteristically middle or working class and, in most cases, it was the woman's age which prompted them to have their first child.

Timing to the second child seemed to be influenced mainly by the desire for a specific interval of time between children and there appeared to be two competing considerations in this regard. On the one hand, it was important to have children close so that they could be playmates and, on the other hand, it was important to have some space between them so that each child could get its share of attention. Most women appeared to be trying to balance these two considerations.

With regard to future fertility intentions, most couples in our sample wanted and were planning on having only the two children. Most had always wanted a small family and could see few reasons to continue with child-bearing. Those couples who were planning (or undecided about) additional children tended to be desirous of a mixed-sex family and/or positively oriented towards larger families.

CONTENTS

PART I INTRODUCTION

CHAPTER ONE THE PROBLEM

1.1 Introduction to the Problem

> The question of the number of children they will have is a vital, complex, deeply involving one for . . . couples.
>
> Rainwater, 1965: 15

If Rainwater's statement on the centrality of family size decisions for couples was true in 1965, it is even truer today. With the increase in reliable contraceptive techniques and the greater emphasis placed upon rewarding alternatives to parenthood, "having children" has increasingly become a problematic issue for women and men. In this study we intend to explore the reproductive decisions of a small sample of Canadian couples. Our primary task will be to examine the couples' patterns of family formation -- that is, to explore why they have the families they have and why they want the families they are planning to have.

The topic of differential fertility is not without a long history. However, three decades of surveys in Britain and the United States have outlined only the gross social parameters of differences in family size. In a "rapid historical summary" of the development of the socioeconomic theory of differential fertility, Goldberg (1975) points out the narrow range of research results, particularly sociological research results[1].

He argues that before sociologists had access to much fertility data, they developed a set of hypotheses to account for fertility trends within and differences between countries. However, in the late fifties and early sixties when they gained access to a surfeit of American data they found that the variable sets, with their large correlation matrices, accounted for very little of the variation in fertility. The sociologists retreated from their theoretical objectives and the economists, treating babies as consumer durables and fertility as an income-price function, moved in. Goldberg goes on to suggest that, until today, it has been these economists who have provided the theoretical excitement and elegance in fertility theory; the sociologists' contribution has been slight[2].

Goldberg chastises the sociologist-demographer for allowing this to happen. As he points out (1975: 90), economists emphasise the direct effects of independent variables, with intervening variables treated essentially as standardising measures. Thus economists have a select list of variables of primary importance -- say, income, child quality and opportunity costs -- and all other factors are at best standardised and at worst ignored. For sociologists, this is not good enough. Finding a gross relationship between independent and dependent variables simply specifies the questions that need to be asked. It is the intervening variables that are of primary importance because it is these intervening vari-

ables which will "flesh out" the undefined space between independent and dependent variables. Goldberg concludes his article with the following strong plea:

> We (referring to sociologist-demographers) have the responsibility to provide intelligent inputs and in many respects we have failed to do so. Our failure on this count derives from some ridiculous faddism within disciplines and irresponsibilities in data collection and analysis. We offer a very narrow range of research results. The base of that research should be broadened immensely. . . . Certainly, if the sociologist-demographers don't wake up they will find their "baby" kidnapped by the economists who may be smarter but who, fortunately or unfortunately, live in a small world.
>
> Goldberg, 1975: 102-103

It was with this criticism of the existing literature uppermost in our mind that we undertook this study. We felt there was a need for a "sociological" dimension in explanations of fertility behavior. Too many surveys and studies of differential fertility had limited their analyses to economic influences. This is not to imply that these economic influences will be ignored in our thesis -- only that they will be but one component in our theoretical (and explanatory) framework. Our intention is to provide an explanation of patterns of family formation that includes both economic and sociological influences.

1.2 Theoretical Background to the Problem

In an historical review of fertility literature, two different emphases in accounts of "why people have the number of children they do, when they do" can be

traced. First of all, there are those (who by and large have been trained in economics) who stress "economic or utilitarian" factors. They argue that fertility behavior is primarily a result of "household choices" -- couples choose a family size which "maximizes overall "utility", subject to the constraints of resources and prices" (Namboodiri and Pope, 1968: 1). Alternatively, there are those (and these tend to have had their training in sociology) who stress "sociological" factors. Advocates of this emphasis may focus upon the institutional mechanisms in society and the "intermediate" variables that link these variables to fertility (see, for instance, Davis and Blake, 1956), or, they may stress the normative constraints on fertility decisions -- "the fertility of any social collectivity tends to correspond with a level prescribed by the social norms" (Freedman, 1961-62: 41). They may, alternatively, use an interactional frame of reference and see the dynamics of the nucleur family as influencing fertility behavior (see, for instance, Hill, Stycos and Back, 1959)[3]. In more recent fertility literature, "integrations" of these two approaches can be found. Using an economic model as the framework, modifications are made taking into account sociological factors. It is a version of an integrative model that we intend using in this thesis, however, before outlining this model, we shall survey the fertility literature.

Because so much of the recent fertility literature has been concerned with economic factors, we shall begin our survey with this emphasis. The survey must surely

begin with Gary S. Becker's now classic 1960 article "An Economic Analysis of Fertility". Although there had been previous attempts to apply economic reasoning to the population area (see, for example, Harvey Leibenstein, 1957; Bernard Okun, 1958; S. H. Cootz, 1957 and before them Malthus, 1798, 1803, 1817, 1827), it is Becker's article which is most frequently quoted[4].

Becker applied the economic theory of household behavior to fertility behavior. He treated the demand of parents for children as analogous to the demand for other consumer durables. Parents were seen as consumers with given tastes trying to maximise their utility subject to the constraints of income and prices. Becker saw the demand for children as both a "quantity" demand and a "quality" demand, the "quality" of children being some function of how much parents actually spent on them. Following the economic theory, Becker concluded that increases in income would be positively related to both "quantity" and "quality" of children demanded. He noted, however, that there was a difference in the income elasticities of each of these demands -- that for quantity being quite low and that for quality being quite high.

Becker proceeded to test one important implication of his theory, namely that the number of children desired would be directly related to income. His data were contradictory. However, he concluded that if the observable data did not seem to support the theory -- that is, if fertility appeared to be negatively related to income -- it was because relevant variables other than income were

intervening. Becker suggested that among the more important of these other variables were the differential growth of contraceptive knowledge between social classes, the decline in child mortality and the secular rise in the cost of children.

The critics were quick to take issue with Becker's model. Duesenberry (1960: 231 - 234) criticised it for not assigning sufficient weight to sociological factors such as education and occupation -- factors he saw constituting formidable constraints in determining individual preferences for children. Spengler[5] argued (1966: 120 - 122) that reproductive behavior was likely not as amenable to rational rules as most economic behavior and, therefore, more likely subject to the influence of hidden values. Becker's strongest critic, though, was Judith Blake. In a series of articles (1965, 1967, 1968, 1969), Blake adamantly rejected any application of an economic theory to fertility behavior. We shall outline Blake's criticisms in some detail[6], as they represent most clearly the "sociological" emphasis[7] that was mentioned above.

Blake's major complaint with Becker's model was its neglect of the <u>social context</u> of reproduction.

> Rather than simply trying to take economic factors <u>into account</u> in explaining family-size preferences, he (Becker) has chosen to propound a <u>solely</u> economic analysis of fertility desires. In doing so he has ignored, or specifically attempted to invalidate, well-known sociological determinants of reproductive motivation.
>
> Blake, 1968: 15
> (Emphasis in original)

Blake's objections were organised around four features

of Becker's analysis: the analogy of children with consumer durables; the concentration on the "consuming" as against the "producing" role of parents; the misapprehension of child costs; and the failure to analyse the utilities involved in having children. We shall consider each in turn.

Relevance of the Consumer Durables Analogy

The first criticism Blake had of Becker's model was its treatment of children as consumer durables. Four reasons were put forth for this criticism, the first of which was that while the acquisition by the consumer of such consumer durables as cars, houses, etc. is limited by actual financial capabilities (cash or credit rating), the acquisition of children is not:

> The "consumption" of a family by individuals who cannot "afford" one is regarded quite differently from their decision to purchase a consumer durable that they cannot afford. In fact, the right to have a family is widely extended to individuals who are impaired physically and mentally, as well as financially.
>
> Blake, 1968: 16

The second point Blake made against an analogy of children with other consumer durables was that parents, in their consumption of children, can not engage in dynamic reshufflings of their consumption behavior in order to maximise their well-being. Consumers of children, as opposed to consumers of other goods, do not have the flexibility to optimise their equilibrium positions by adjusting their consumption.

> Such an assumption of freedom to change the items one consumes -- an assumption that underlies the

> economic theory of demand for consumer durables -- is sociologically absurd when applied to children. At best, parents can only anticipate, not re-arrange, their equilibrium position with respect to offspring. . . . If the parents miscalculate and find that the marginal utility they actually derive from an additional child is less than they would have had from an expenditure on something else, they cannot, normally, adjust the situation.
>
> Blake, 1968: 16

Blake's third criticism against treating children as consumer durables was that the acquisition of children of a particular quality or type can not be controlled by the parent. In contrast, the consumer of other durables is able to choose among visible products whose qualities can be ascertained.

The final objection Blake had against treating children as consumer durables was that parents are not free to use (or abuse) their children as they like.

> Parents do not "own" children, and, as guardians, they are legally required to keep them in minimum repair, not to abuse them physically or mentally, or, through negligence, allow them to be victimized by accidental violence and the like.
>
> Blake, 1968: 17

Parents as Producers of Children

The second criticism Blake had with Becker's model was its failure to deal adequately with the influence of factors to which parents, as producers of children, give importance in deciding how many children they want to have. Because parents are "producers" as well as "consumers" of children, their desire for offspring will be influenced both by the production problems involved in having a family as well as by the utilities they expect to gain.

Blake acknowledges that Becker recognises the productive role of parents, but argues that he treats it entirely as part of the costs parents pay for the utility they expect to gain. Blake claims, however, that there are elements that cannot be subsumed under the heading "cost of production".

> There are, however, elements in the productive process -- particularly relating to the structure of the productive unit and its articulation with the society at large -- that cannot fruitfully be subsumed under the category of costs.
>
> Blake, 1968: 17

For example, Blake presents the problem of producing an adequately socialized child. Adults by themselves cannot do this job; the interaction of children with one another is required. Of course, this interaction can be achieved in a number of ways -- siblings are not necessarily required. However, Blake argues that the isolation and geographical mobility of the nuclear, modern family makes the substitution of non-siblings for siblings difficult. "Hence, in facing up to the problem of providing adequate socialization, parents are typically motivated to avoid the "only child" type of unit" (Blake, 1968: 18).

In sum, Blake's second criticism of Becker's model is that it ignores the influence the productive role of parents has on family size desires. Furthermore, the influence is such that it is unlikely to produce a positive relation between family size desires and income under any and all conditions.

Misapprehension of Child Costs

The third criticism Blake had with Becker's model was that by concentrating on direct costs of children (resources actually spent on childbearing and rearing), it ignored indirect costs (alternative utilities on which parents could spend their resources). Moreover, with respect to direct costs, Becker failed to recognise, or denied the importance of, factors which made these costs heavier for wealthier parents.

Blake argues that Becker overlooks two important points in his consideration of direct costs. First, parents are not reasonably able to separate the standard of living of their children from their own. Because they all live in the same house, eat the same food, etc., it would be impossible for parents to do other than provide their children with a standard of living similar to their own. Second, the way of life at a given social level influences the standards of child quality that are acceptable. The way of life of the poor leads them to accept lower standards of child quality. The wealthier, however, are under pressure to contribute to standards in children that will both conserve present advantages and provide additional ones.

> Concern with child quality is intensified among the more affluent by the social mobility -- both upward and downward -- that is a persistent feature of life in middle and upper income strata. . . . It is thus not uncommon for families in the wealthier strata of modern societies to feel subjectively under great economic pressure despite their objectively prosperous condition.
>
> Blake, 1968: 20

Becker seems to argue that if richer couples decide to spend more per child, they do so as a matter of voluntary choice, whereas Blake holds that expenditure per child in any social class is not a decision variable but rather a constraint (imposed in part by the respective reference groups) on fertility decisions.

With respect to indirect costs, Blake argues that Becker's model does not consider the alternative utilities that enter into family size decisions. The argument is that, in addition to monetary costs, the bearing and rearing of children involves attention and time on the part of parents. Furthermore, higher levels of social status involve parents in interests and activities which are incompatible with large families.

> . . ., the way of life of upper-income groups is more competitive with children for time, effort and finances than is the life-style of those in lower-income brackets. The former tend to be more active in political, civic and community affairs, . . . more wholly committed to the demands of work and of "running" things in general, . . . have more attractive and diversified consumption opportunities than have those of lesser income. An upper-income person is normally under some pressure to take advantage of these opportunities.
>
> Blake, 1968: 21-22

The Utilities of Children

Blake's final criticism of Becker's model had to do with two assumptions that were necessary to Becker's thesis of quantity income elasticity, but which Blake felt were incorrect.

The first assumption is that there is no family size threshold below which couples (even poor couples)

will strongly resist falling. Blake argues that there is a family size threshold which all wish to attain.

> By exercising control over every step in the reproductive process, but principally by a ruthless exclusion of structured alternatives to and substitutes for family satisfactions, and kinship affiliations . . . societies channel motivation in the direction of goals that imply the advent and existence of children. One can become a "parent", "have a family", be a "mother" or "father", only by acquiring children. That one should desire these statuses is the final result of complex institutional control, but, given this desire, children and only children can satisfy it. It is the societal support for the family that provides the strong desire for children that makes it highly unlikely that poorer people will be willing either to remain childless, or to curtail their family size to the extent required for producing a direct relation of family size and income.
>
> Blake, 1968: 22-23
> (Emphasis in original)

The second assumption is that there are no systematic social class differences in the relative utilities of children ("taste" for children) that limit the family size desires of the well-to-do. Using the same reasoning used to reject the first assumption, Blake argues that one can expect variability in the relative impact of familial goals on motivation, and thus structural differences in "tastes" for children. As was outlined in the discussion on the indirect costs of children, the upper classes seem to be under greater pressure from non-familial demands than the lower classes, and hence may find greater utility in small-to-moderate size families.

Blake's criticisms of the economic model were in time criticised themselves. We shall not consider these criticisms here[8], as our main aim was to outline the

broad contours of the two emphases we saw in the literature. To repeat, there was the economic emphasis in which having children was seen as similar to purchasing consumer durables and, therefore, increases in income were hypothesized as leading to more and "better" children. Conversely, there was the sociological emphasis which argued that economic factors could never solely explain family size preferences because they ignored well-known sociological factors which often worked in ways opposite to the economic considerations.

At this stage Easterlin[9] (1970) entered the debate by suggesting an "integration" of the two approaches.

> . . ., it became increasingly clear that economists and sociologists engaged in demographic research were largely talking past each other. Too often, sociologists view the economic theory of fertility as simply an argument for the effect of income on behavior. On the other hand, economists have substantially ignored factors emphasized in sociology.
>
> Easterlin, 1970: 127

Easterlin suggested that sociologists and economists could fruitfully get together, the former making use of the type of model that economists use to describe and predict consumption, and the latter paying more attention to "taste" variables in their models.

In Easterlin's model, fertility behavior was seen as the result of household choices, in which resources were weighted against preferences. Parents were seen as consumers with given tastes trying to maximise utility subject to the constraints of income and prices. Thus the three factors income, tastes and prices were the basic building blocks of the theory.

With regard to income, Easterlin argued that income at one point in time was not a valid representation of the income concept relevant to household decisions. Thus his model considered potential income flow through time -- a concept that took into account income potentials represented by the earning capacity of the wife (and other household members) and prospective changes in the income stream over time.

In considering prices, Easterlin reformulated the concept of "child cost" to take into account the "opportunity" costs of the parents and other indirect costs incurred in childbearing and rearing. Mincer (1963) had empirically examined the role of opportunity costs and concluded that the appropriate price to consider was the opportunity cost of the wife -- that is, her potential earnings in the market place. Easterlin agreed with Mincer's premiss that the time required for childbearing and rearing was relevant to fertility decisions, but questioned whether the potential earnings of the wife were the best indicator. A working wife would not necessarily assess the cost of childcare in terms of the earnings she had foregone, but, rather, in terms of the cost of the relevant childcare services she was using. Thus Easterlin's model calculated the opportunity costs of the parents in ways other than a simple consideration of the potential earnings of the wife.

With regard to tastes, Easterlin advocated that the social determinants, and the non-static nature, of tastes

be explicitly recognised in the fertility model. He conceived of tastes as a "preference field or map" which embraced all possible combinations of goods. Attached to each combination was a subjective evaluation of its worth in terms of satisfaction to the household. Families did not necessarily desire a single fixed amount of any one good, rather they considered a variety of alternatives ordered in terms of prospective satisfaction. Furthermore, tastes were to be seen as relative (i.e. "more or less") not absolute in nature. It thus followed that the strength of a household's desire for any given good, in this case children, had to be considered in the context of its attitudes toward other goods competing with children for the household's resources.

The most radical change Easterlin made to the more traditional economic analyses of fertility had to do with the subject of family limitation practices. He argued that no population is completely ignorant of birth control techniques. Abstinence is universally known and populations such as those of Western Europe had managed to reduce their fertility long before modern contraceptives became known and available. Thus it was not satisfactory simply to say that variations in birth control knowledge and techniques led to differences in fertility over and above those due to consumer choice. What Easterlin proposed was to apply the theory of consumer choice to decisions regarding fertility control as well as desired family size. For this purpose, a new good, coition, was introduced into the model and subjected to the same

treatment as other goods. Coition which might have resulted in an unwanted pregnancy was distinguished from coition which would not, and different utilities and costs were attached to each type.

Lastly, Easterlin reemphasised the need to view the demand for children as a "joint" demand -- "joint" in the sense that it involved children, coition and other competing goods. He summed up his model as follows:

> At any given time, a household (or a couple contemplating union) has, on the one hand, a structure of preferences relating to goods, children, leisure, and fertility control practices, shaped largely by prior experience. The household has also certain income potentials, taking account of the earning possibilities of husband, wife, and other family members as well as any non-labor income. There are, in addition, various price constraints, such as the prices of child care and of various fertility control methods relative to those of goods in general. Out of the balancing of preferences and constraints, decisions are reached on marriage, fertility control practices, fertility, wife's labour force participation, and perhaps even husband's hours of work. In the course of the reproductive years preferences are modified by ongoing experience, and income potentials, prices, and available fertility control methods may change with consequent appropriate changes in these decisions. The fertility record of a given household reflects this balancing of preferences against constraints over the course of the full reproductive age span.
>
> Easterlin, 1970: 138

By providing a sociological dimension to a basically economic model, Easterlin had begun to get sociologists and economists "talking to one another". His model was used by numerous researchers; Hawthorn, for example, used the model in his 1970 book The Sociology of Fertility. However, there were still sociological criticisms that had not been entirely met and further criticisms that had developed as the model was used. It was at this point

that Namboodiri published his economic framework for fertility analysis (1972a). This framework had evolved from considerations and criticisms of previous economic frameworks, and in many ways, we think, furthered the "integration" of the economic and sociological approaches[10].

The guiding principles underlying Namboodiri's model were (1) fertility decisions are joint decisions of the husband and wife, and (2) fertility decisions are sequential decisions, each decision being to have or not to have another child at a given time. Thus, in the model of fertility behavior, the husband and wife are initially considered separately and then their joint decision process is considered. Further, the dependent variable is not family size but, rather, a sequential decision in which each step deals with the addition of a(nother) child to the family.

It was this shift to considering fertility decisions as sequential decisions which made Namboodiri's work, for us, particularly important. Most previous models of fertility decision making had considered the impact of household economics on <u>completed</u> family size. Certainly Becker (1960), Blake (1967, 1968) and Easterlin (1969, 1973, 1975, 1978) all work under the assumption that a long-run equilibrium family size exists[11]. Easterlin, for example, in his latest theoretical formulation writes:

> The dependent variable is the completed fertility of a married couple. To simplify the exposition, the following assumptions are made: . . . (2) prospective parents are not concerned about the spacing

> of births; . . . (5) there is no uncertainty about the independent variables over the planning horizon. The quality of children and the work/leisure allocation of time are also taken as given, so that the problem of choice focuses on number of children versus goods for the parents. . . . The approach adopted is that employed in static economic analysis.
>
> Easterlin, 1978: 79

This static decision making framework is in direct contrast to the dynamic perspective outlined by Namboodiri[12]. In this perspective the dependent variables are, to repeat, "fertility decisions taken at different points in time, and the success or failure in carrying out those decisions" (Namboodiri, 1972a: 198). That is, the major focus is on birth intervals and completed family size is seen as the sum of a sequence of outcomes culminating in the decision to have no more children. The advantage of this perspective, at least in our view, is that it emphasises the possibility that each birth occurs in and is influenced by a different set of circumstances (Namboodiri, 1974; Rosenzweig and Seiver, 1975). The static perspective, because the variable of interest is the completed family size, does not have this flexibility. As Hout suggests:

> From a (dynamic) perspective, the birth of each child may be viewed an an event that "alters the parents' perception in a way they cannot entirely anticipate" (Rosenzweig, 1976: 339). This . . . perspective suggests shifts in the impact of socioeconomic variables on subsequent births. The perfectly general utility function underlying the static model allows both nonlinearities and interactions in the effects of the socioeconomic and demographic variables related to completed family size. However, the one-period decision-making framework in which the model is cast precludes the possibility that exogenous variables may interact with parity in the determination of fertility, because to

include parity, a lagged endogenous variable, would be incompatible with the one-period specification.

Hout, 1978: 139-140

Presently, most fertility research still works under the assumptions of a static decision making framework. For instance, researchers such as Cartwright (1976), Askham (1975) and Peel and Carr (1975) in the United Kingdom, Westoff and Ryder (1977) in the United States and Beaujot (1975) and Beaujot, Krotki and Krishnan (1978) in Canada use as a dependent variable total or completed family size. This emphasis may be changing, however. A number of recent studies (for instance, Hout, 1978; Bumpass, Rindfuss and Janosik, 1978) call for a shift of attention to the timing and spacing of births.

With regard to the "integration" of the sociological and economic emphases, most present work done by economists seems to be, at best, "standardising" sociological concerns (see, for instance, Easterlin, 1978; Becker and Tomes, 1976; Cain and Dooley, 1976). It would appear that sociologists working in the area of fertility decision making have tried to integrate economic and sociological elements more seriously in their research (see, for instance, Beaujot, Krotki and Krishnan, 1978; Cartwright, 1976; Askham, 1975) but, as we have said, there still remains much to be done.

We will end our review of the literature here. Although covering only a few authors, most perspectives and trends have been alluded to. To repeat, there appears to have been two strands throughout the literature -- one emphasising economic or utilitarian factors and the

other emphasising sociological concerns. Integrations of the two approaches have more recently been suggested. Crosscutting this is an emphasis on either a dynamic or a static conception of marital fertility. The dynamic model is the more recent and emphasises fertility decisions as sequential decisions. The static model, conversely, concentrates on completed family size with little regard for the spacing of births. Our leaning, which undoubtedly is apparent, is towards an integrative, dynamic model. This is, in fact, the model we intend using in the thesis and the following section of Chapter One outlines it in greater detail.

1.3 Theoretical Framework of the Thesis

The theoretical framework we intend using in this thesis is, as we mentioned above, integrative with a dynamic perspective. That is, the influence of both economic and normative influences will be considered on each parity progression. The dependent variable is not total family size, but, rather, the probability of a couple adding a(nother) child to their family at a given parity, and the intervals between births[13]. Fertility behavior at each step is conceptualized as working through three factors[14] (each of which is discussed below):

1. the demand for children -- that is, the number of children a couple would have if they had perfect control over their fertility;

2. the potential output of children -- that is, the number of children couples feel they would have if they did not deliberately control their fertility; and

3. the costs of fertility control -- that is, the subjective (or psychic) costs and objective costs involved in learning about and using specific contraceptive techniques.

The Demand for Children

The demand for children (D), in our model, is seen as a function of income (I), prices (P) and tastes (T).

$$D = f(I,P,T)$$

It is posited that, at any given point in time, couples have certain tastes which they attempt to maximise subject to the constraints of income and prices. Thus a couple's demand for children is the result of their resources being weighted against their preferences and the costs they see attached to having children[15].

Demand variables (often referred to in the literature as "preferences", "ideals" or "desires") are the most frequently stressed in explanatory models of differential fertility. There is, however, a difference between how they are traditionally viewed and how we intend viewing them. Easterlin provides an example of how demand variables are normally used. He suggests that a couple may be conceptualized as beginning their marriage with "a structure of preferences relating to goods, children, leisure and fertility control practices, shaped largely by prior experience" (1970: 138). Couples then weight these tastes against what they "anticipate" their family income to be and their expectations of the prices of childcare. Their actual fertility behavior

"reflects this balancing of preferences against constraints over the course of the full reproductive age span" (1970: 138).

This traditional conception of demand variables implies that couples adopt at the beginning of their marriage "a utility-maximizing lifetime plan for childbearing, for expenditures of time and money on children, and for other sources of parental satisfaction not related to children" (Willis, 1973: S17). In other words, because most previous research has adopted a static model of marital fertility with its concomitant emphasis on total or completed family size, the demand for children has had to become conceptualized as a "one-off" decision on the part of the couples at the beginning of their marriage. With our adherence to a dynamic model of fertility behavior, with the emphasis on how families are built up, on the other hand, we do not have to make this assumption. Because we are concentrating on parity progressions, we are able, at each step in the process, to let income, prices and tastes vary. At any given point in time, a couple's demand for children is seen as a function of these three variables, but these are variables which shift as the couple's life unfolds before them.

The other facet of the demand-for-children factor which deserves mention has to do with rationality. While our conception of a couple's demand for children implies that the couple is rational -- that is, their action is

intentional and goal-oriented -- we do not intend using the rationality framework associated with the "classical economic man". This framework, which is widely used in economic analyses of fertility and is, for example, implicit in the works of both Becker and Easterlin, implies that couples are aware of all possible alternatives of action, they can foresee the consequences of each in probability terms and they can rank order all alternatives in terms of utility, hence making possible an optimal choice or decision. These assumptions we feel are untenable. As Askham suggests (1975: 16-17): "Utility models tend to overestimate the ability of individuals to make rational choices. If, as Hawthorn indicates, "utilities are extremely difficult to measure", then how can individuals themselves decide between x amount of one good, versus y amount of another, especially when many more than two competing goods may be involved?". All our model implies is that at any given time couples will have some preferences which they will attempt to satisfy as best they can, given what they know about their incomes and the prices of children. It is not assumed that couples are omniscient in their knowledge or their ability to make decisions. Hawthorn makes a similar argument for his model:

> Sociologists . . . may feel that there are two objections to it . . . it presupposes rationality . . . in reply to the . . . objection, these choices need not be rational in any strong sense. All that the model demands is that the actor it is applied to will have at least one preference and that he or she does not have unlimited resources to realize it. This demand probably defines,

> indeed, the necessary conditions for regarding someone as a human agent at all.
>
> Hawthorn, 1970: 117

The Potential Output of Children

The second factor in the theoretical framework which we suggest influences child-building patterns is the couples' anticipated natural fertility -- that is, the number of children they feel they would have if fertility was not deliberately limited.

In Easterlin's model (1975, 1978), potential output of children refers to the couples' natural fertility -- the number of children they would have if they did not deliberately control their fertility. This is, however, unknown to most couples. It seems to us that what orients peoples' behavior is not their natural fertility per se, but their perceived natural fertility. For example, amongst our sample, there were a number of couples who used contraception much longer than was necessary because they thought they were fecund[16]. When they did try for their first child, however, they found themselves unable to conceive. The fact they did not begin trying for a child until they wanted one was because they were orientating their behavior to what they perceived their natural fertility to be. Hence the inclusion of this variation of the variable within our model.

The Costs of Fertility Control

The demand for children and the potential output of children together determine a couple's motivation to

use some method of fertility regulation -- the third factor in our theoretical framework. If the perceived potential output of children is less than the demand for children, there should be no desire to limit fertility. On the other hand, if the perceived potential output of children exceeds a couple's demands, that couple should be motivated to regulate their fertility. Motivation is, however, a necessary condition for a couple to use birth control; it is not a sufficient condition. Birth control itself imposes costs on the couple: subjective costs (the displeasure associated with obtaining and using a given contraceptive technique); objective costs (the time and money necessary to acquire the goods and the knowledge and skill to use them); and health costs (the health risks associated with the various contraceptive techniques). Whether or not a couple will actually use a contraceptive technique -- and the degree of success they will have with its use -- will depend on their perception of the costs of fertility regulation as opposed to their motivation to limit their fertility.

In sum (and to repeat) fertility behavior in this thesis is conceptualized as being influenced by both normative and economic factors. It is posited that couples have certain tastes for children which they attempt to satisfy as best they can within the constraints of income and prices. Their demand for children is not, however, the sole determinant of their behavior.

Their perceived natural fertility and their ability (and desire) to use contraception all influence their decisions regarding a family. The fertility model we intend using is also dynamic -- dynamic in the sense that our unit of analysis is not total family size but rather the probability of couples deciding to have (further) children at each parity level. All variables are allowed to vary not merely between couples but over time -- in fact, it is predicted they will vary in the sense that we expect the factors which lead to the first birth, for example, to be different from the factors leading to subsequent births.

CHAPTER TWO RESEARCH TECHNIQUES

2.1 The Research Design

As outlined in the introductory chapter, the major aim of this thesis is to explore the various patterns of family formation within the context of a model which stresses rationale, perceived fecundability and execution factors. Moreover, we hope to conduct this exploration within Weber's definition of sociology as "the science which aims at the interpretative understanding of social behavior in order to gain an explanation of its causes, its course and its effect" (Weber, 1962: 29). As we said in Chapter One, most studies of family formation intentions[1] have been large-scale surveys in which a number of independent variables have been correlated against a dependent variable until a satisfactory amount of the variance has been accounted for. We did not wish to work solely within the conventional assumptions of this accounting model of survey analysis, however. We hoped, to use Hawthorn's words, to explain patterns of family formation in terms "of the reasons that the actors give or might have been expected to give for their ideals or practice . . . explanations (which) consist of chains of reasoning in the actors themselves" (Hawthorn, 1968: 73).

Our criticisms of the bulk of this existing literature arise from a number of sources. The previous literature has, as we mentioned before, been forced into

taking a very static view of the dependent variable[2]. Couples are asked to state how many children they want or will have at some future date, although one needs to talk to only a few couples to realize that this is not how most people view family size[3]. For them, the decision is highly situational and can be considered only within their perceived ability to actually have children and their success or failure with birth control techniques.

Another criticism arises from our feeling that the nature and importance of the independent variables can not be satisfactorily dealt with in a simple accounting model. Researchers tend to come up with "shopping lists" of "important" independent variables and couples are asked to put a price on the relevance of each to their completed family size. No room is left for the couple themselves to explain the processes through which their family was formed -- which may or may not include references to the researcher's "shopping list".

A further complaint is that often there is no discussion of exactly how a set of norms and attitudes can affect behavior -- of what it means, say, to find a correlation between religious affiliation and family size. We would agree with Blumer (1956) that it is not sufficient to conclude analysis by pointing out how much variance has been accounted for. Explaining patterns of family formation is one area where it may also be informative to examine the reasons couples themselves give or might be expected to give when asked to account for

their behavior -- to consider the factors they themselves see as important influences on their behavior.

The most telling criticism of these large-scale surveys, though, may be their relative lack of "pay-off" -- "pay-off" in terms of how much more we know about family-building patterns. After virtually thirty years of study, many surveys still conclude with a reference to "the complexities of the phenomenon under investigation" (Westoff and Ryder, 1977: 340). Perhaps these large-scale surveys' greatest contribution is the realization that we do not know enough yet about the processes of family formation to resort to a self-administered questionnaire[4]. Fertility <u>is</u> complex, and until we understand more clearly the processes involved, then we really do not know what to ask whom, when.

With these considerations in mind we decided that close interviewing of a smaller sample would be our best research strategy. By actually discussing their families with couples, we felt we would stand a better chance of uncovering the factors that had gone into their decisions. Having decided to interview respondents, our choice was between alternative techniques of interviewing and this, in turn, involved decisions about the type of information required and the type of analysis to which that information would be subjected.

Interviews are normally classified on an unstructured-structured continuum. The two extremes are, on the one hand, a completely formal interview in which the

interviewer merely reads out the questions and records the answers and, on the other hand, an informal situation which is given shape and form by the individual respondent.

The advantage of the structured interview is that the respondent is offered the same stimulus in the same form as all the other respondents. The information gained from a structured interview can also be more easily coded and analysed and, thus, more easily replicated in the future by other researchers. Its disadvantages are pointed out by Denzin:

> Conveying meaning in the schedule standardized interview (that is, the structured interview) is difficult to achieve, because respondents are from different backgrounds and settings and frequently a phrase or question does not elicit common meaning. . . . When the problem of respondent motivation is considered, the SSI form (the structured interview) again raises problems. . . . Last, the problem of fabrication looms largest with the SSI (the structured interview), for too frequently the interviewer has no specific set of questions with which to challenge the respondent's reply.
>
> Denzin, 1970: 129-130

An additional disadvantage was pointed out by Grebenik and Moser (1962: 21): "verbal descriptions of individual cases, institutions and the like can often give a more vivid, richer and, in a sense, deeper picture of life than the statistical tables to be found in conventional survey reports". Busfield and Paddon (1977) confirmed this view by pointing out that while their formal interviews provided precise quantitative data within a limited range, it was their intensive interviews which provided the richer material.

Unstructured interviews, conversely, can provide "vivid and richer" descriptions of individual cases.

Other advantages are that the fieldworker can reformulate the problem or modify his categories if necessary as he proceeds with the research, he has a greater ability to avoid misleading or meaningless questions, he has his often very revealing impressions to refer to and he can usually handle difficult to quantify variables better than a structured questionnaire which must attempt to operationalize them. The disadvantages of unstructured interviews are that the data are often difficult to treat statistically, hence conclusions, "particularly in terms of representativeness and reliability, . . . are less rigorous"(Bulmer, 1977: 228). There is also the possibility of bias: "With the USI and UI forms (both unstructured interview techniques), . . . untrained interviewers will often reinterpret questions and restate them in a manner quite different from that intended by the investigator" (Denzin, 1970: 130).

Merton and Kendall (1946), in an attempt to get the best of both types of interview, developed what they termed the "focused" interview. In this, there is a fixed framework of questions, and yet the interviewer has a certain latitude within it. Its main value is that it gives the respondent the opportunity to express himself on matters of significance to him rather than those presumed important to the interviewer. It also, because there is some structure to the interview, allows for more than "impressionistic" analysis and interpretation. Its main disadvantage is pointed out by Denzin (1970: 125): "This form of the interview requires that each inter-

viewer be highly trained in the meaning of the desired information and in the skills of phrasing questions for each person interviewed". With a "highly trained" interviewer, this technique is likely unsurpassed (Denzin, 1970: 132). However, often an untrained (or poorly trained) interviewer is involved in the data collection stage and he may lead the interview

> in accord with wrong impressions he has gotten from the first informants contacted. Or his own personal characteristics or personality needs may attract him into stronger relationships with certain kinds of informants than with others, and thus prepare the way for his receiving an undue amount of information from persons who are biased toward one point of view. Perhaps, too, the first hunches or hypotheses that emerge attract the field worker to instances that confirm these notions and blind him to data that point the other way.
>
> Dean, Eichhorn and Dean, 1967: 276

But, one can easily overstate the problem of interviewer bias. Recent writers[5] have commented on the false premise that more formalized sociological methods are "value free". Selltiz, Jahoda, Deutsch and Cook (1962: 239) point out that social scientists are universally dependent on data that have been collected by means of oral or written reports and these are "invariably subject to essentially the same sources of error and bias as those collected by survey interviewers".

It was Merton and Kendall's fairly unstructured interview involving the flexible use of a schedule that we finally decided to use. We felt that this type of interview would provide the type of in-depth material we wanted of the respondent's <u>own</u> perception of his or her unique situation. Since only the one person was to be

involved in the interviewing, there would be reduced problems of misunderstanding and misinterpretation of the schedule, and of different questions being given varying importance. Any bias would be constant throughout so that the schedules, when complete, would have a degree of uniformity.

The major problem -- a problem common to all research where the author, the interviewer and the data analyst are one and the same person -- is the tendency that the very expectations that led to the promotion of the research will determine the responses given. Particularly with an unstructured interview technique, there is the very real problem of "leading" the respondent -- "leading" in the sense that the respondent may elaborate on an issue that is of little importance to him because of some show of agreement from the interviewer. Where one wants to explain patterns of behavior in terms "of the reasons that the actors give or might have been expected to give" (Hawthorn, 1968: 73), this can be a very real source of bias.

We attempted to overcome this problem of interviewer bias to some degree by being aware of the tendency and consciously trying not to give "cues" to the respondents during the interviews. We attempted to "accept" the respondents' information by being a sympathetic and curious listener. General questions such as "Why did you have your first child then?" were asked repeatedly in various forms until it appeared we had fully covered the topic. Dean, Eichhorn and Dean commented (1967: 293) that social

interaction often takes place on two levels: "the socially expected" and "what really goes on". This certainly seemed to be the case with our respondents. The interview normally began with the woman providing the "socially expected", quick answer. As the interview progressed and we covered the same ground over and over, the woman usually relaxed, appeared to drop many of her pretenses and gave us longer and, what seemed to be, more "realistic" explanations of her behavior[6].

Interviews were also done slowly (no more than one a day) and we purposely did not analyse the data or reread the literature whilst they were ongoing. During the pre-test stage, we found that there was a very real tendency for us to "look for" tendencies and trends that other interviews and our reading led us to believe might be important. During the actual data collection period, each interview was viewed as "unique" and we attempted to suspend all previous feelings and facts we might have had about a particular respondent to try and get them to explain to us <u>why</u> they were in the situation they were in. Our primary goal at all times was to spark the respondent into telling us about her family building behavior in as free and frank a manner as possible. It is difficult to see how this problem of bias can be completely avoided; however, all things considered, we were very pleased with the way respondents did respond and explain their own unique situations. More times than not we left the interview situation feeling we had come to "understand" why that particular couple had done what they had done.

2.2 The Sample

Having decided that an exploratory study with flexible use of a schedule was the means that would best be able to meet our needs, we had to decide on a suitable population to investigate. Because the interviewing had to be done by the author, we felt it necessary to narrow down the potential population quite drastically. After considering various options, we decided to concentrate on couples who had just had a second child -- that is, couples who had one child at home and who had just had a baby. This group, we felt, had a number of advantages:

a. The most popular family size is increasingly two children. This is reflected both in terms of the number of children couples are having (see Chapter Three) and in their stated family size norms and ideals (see, for example, Krishnan and Krotki, 1976 and Beaujot, 1975). By considering two children families, we would be dealing with the most typical family situation.

b. Women who have just had a child should be best able to remember reasons for having the child spaced as it was. Moreover, most women just having a second child will be physically capable of having many more. But, most will not, at least immediately, be wanting the third. By interviewing these people just after having their second child, problems of controlling subsequent births should be uppermost in their minds and, therefore, a good discussion topic.

c. Women who have just had a second child are a group

which can be identified and contacted for interview.

Cartwright, who also used as a sample women who had recently had a child, outlines these advantages in more detail:

> The sample has a number of advantages. One is that by defining the sample in this way a relatively high proportion of parents are likely to respond and to have a feeling of involvement in the study. People who have been selected because they have recently had a baby seem to understand and accept the basis of selection better and to identify with the survey more, because they have been chosen for a clearly defined positive reason, than people chosen "at random from the list of voters". A practical advantage is that mothers of young children are often at home much of the time so are relatively easy to contact and often prepared to spend time being interviewed.
>
> But probably the most important advantage is that the interviews took place soon after people must have made "decisions" about whether to have another baby soon after the last one, and what method of contraception, if any, to use at that particular stage in their lives. These "decisions" may have been taken after careful deliberation or they may be negative ones in the sense that no decision and no action was taken which has obvious implications for likely future events. Either way, parents of young babies will have inevitably passed through a critical phase in their family building programme. They were seen soon after this crucial phase and therefore at a relatively good time to explain and tell us about the decision-making process (or lack of it) as they saw it. Moreover, the decisions they were asked about were generally perceived as important ones for them, so for the most part they were interested and willing to discuss them.
>
> Cartwright, 1976: 2

Our sample was drawn from births at the Royal Alexandra Hospital in Edmonton, Alberta, Canada. Edmonton is the capital and largest city in the province of Alberta, with a population of just over half a million residents. The city is Canada's fastest developing economic area -- largely because of the vast reserves of oil and natural

gas found to its north, but also because of the agricultural land which surrounds it. With its resources and location -- Edmonton is the northernmost major city in the free world and is at the center of Western Canada -- the city is expected to become a key area in the country.

Because of its booming economy, Edmonton has become the center of a great deal of in-migration, most of which (given Canada's tightening restrictions on overseas migration) has been from other, more deprived areas of Canada. The city has a rich mixture of ethnic cultures -- at least fifty-four are officially organised and acknowledged by the city. The British Isles contribute the greatest percent of the population (45 percent) with the Ukraine and Germany (13 percent each) second and third.

The Royal Alexandra claims to be the largest maternity hospital in Canada. It is certainly regarded as the major obstetric center in Western Canada and handles over fifty-five percent of the births in Edmonton[7]. The Hospital is owned and run by the City and is situated within the downtown area. There are three other hospitals which handle maternity cases in Edmonton -- the University Hospital, the Miscericordia and the General. The University is a teaching hospital and deals primarily with first births. The Miscericordia and the General are smaller hospitals located away from the city center and, although they undoubtedly handle a percentage of second births, we had no reason to suspect that these were any different from the births at the Royal Alexandra. The Miscericordia is located in a more affluent area of the

city and undoubtedly draws more well-to-do patients. Most of our couples, though, even those with very bright prospects, were not at the stage of being able to afford to live in these prosperous areas[8]. The majority of Edmonton obstetricians and gynecologists use the Royal Alexandra Hospital and any family physician who wants to confine his or her patients in the Hospital may do so by applying for privileges.

We were aiming for a sample size of one hundred[9] and we felt, from our pre-test experiences[10], that we could handle approximately five interviews per week. Thus each week, from records kept in the delivery room at the Royal Alexandra Hospital, we drew up a list of all women who had just had their second child and randomly chose six names from this list. We then approached these six women and if they met our criteria -- they had a child at home, they had just delivered a second child and they were sufficiently skilled in English -- we explained the study to them and asked for their co-operation. An extra woman was chosen each week because through experience it was found that a percentage of women who from their obstetric records had had their second child, had no first child living with them. The first infant they had given birth to had either died or they had given it up for adoption. Since we were interested in couples with a family size of two, these people were not suitable for study. Similarly, a very small percentage of potential respondents could speak no English (two, both of whom were recent immigrants from Pakistan)

and we eliminated these people also from consideration. If the women met our criteria and were prepared to take part in the study, we asked them for some preliminary information and made arrangements to recontact them six to eight weeks later in their homes. The results of our contacts are as follows:

	Total	Percent
Total Selected	118	
Interview successfully completed	105	89
Refused - in hospital	3	2.5
Refused - at follow-up	7	6
Non-contacts at follow-up	3	2.5

Two of the refusals at the follow-up were because of the husband's objections. The remainder were because the woman found herself too busy with two children to spare the time to be interviewed. The non-contacts had moved from the Edmonton area between leaving hospital and their interview and could not be traced.

The Royal Alexandra Hospital draws its patients from Edmonton and area and likewise for our sample: 66 percent (69) of the respondents were from Edmonton proper, 25 percent (26) were from the surrounding "dormitory" towns, and 9 percent (10) were from surrounding farms and acreages.

In addition to the one hundred and five women successfully interviewed, we spoke with fifteen husbands -- thirteen completed the questionnaire with their wives and two answered specific questions. We had initially

wanted to interview all of the men but this proved to be beyond our means. The interviews were carried out between February 1977 and September 1977 and as the summer approached fewer and fewer couples were prepared to be interviewed in the evening -- the only time suitable for most of the men. It was either "too hot" or they had "too much yard work to do". The interviews that were done with husbands also suggested that there were potential problems in interviewing husband and wife together and we had no resources to do other than this. Very few of our couples lived in large, spacious homes and in the two cases where we attempted to interview the husband alone (interviewing the wives by themselves was easy enough as they were normally home alone during the day) the wife was put in the awkward position of not knowing what to do with herself. In both of these cases the wife joined the interview not long after it begun -- it became increasingly difficult to conduct the interview with her hovering in the background and we did not feel we could ask her to leave her own home.

When we did interview the husband and wife together we ran into problems. With some, the husband refused to take the interview seriously (a problem <u>never</u> encountered with the women) and this made it difficult to complete the interview schedule. Other couples seemed to try to agree with each other so that if the husband gave his views first, the wife would agree and if she spoke first, he would nod and refuse to elaborate. They may well have had similar views, but our impression was that they

did not. Each couple was given a set of attitudinal statements to agree or disagree with and very different answers were given by the couples on these. Moreover, many women whom we interviewed on their own were able to clearly outline their ideas and plans for the future and their husbands'. These often differed and the respondent would laugh and suggest the way the conflict might be resolved (i.e. "I might wait an extra year to please him but, by golly, I'm going to have my boy!").

For the most part, we were never as happy with the interviews with the couples as we were with the interviews with the women alone. It was difficult to build as good a rapport with the couples -- the husbands never seemed as interested in discussing their families with us which in turn tended to put off their wives. It was almost as if they thought the topic was more in their wife's realm and they were only condescending to take part. Possibly if they had been the initial contact, if they had been interviewed separately from their wives or if a female and male interviewer could have attended each interview this problem could have been overcome. But, as we mentioned before, we had no resources to do other than what we did and under the circumstances, we felt it better to get good interviews with the wives alone than mediocre interviews with the couples.

Safilios-Rothschild (1969) has criticised family sociology for becoming "wives' family sociology" -- because of the ease of interviewing wives, marital and

familial decision making studies are often based on wives' answers with the assumption that these can be used to predict husbands' views. Safilios-Rothschild's (1969) examination of Detroit and Athenian husbands' and wives' perceived decision making patterns found that this was not so -- there was a considerable degree of divergence between the spouses' points of view. This finding has been repeated numerous times; most recently, Lolagene Coombs (1978: 57) concluded that "the views about the reproductive goals of one marital partner cannot with confidence be assumed to represent the views of the other". Our data, as we mentioned above, also showed evidence of this. Many women reported that they and their husbands held different reproductive goals but, most interesting enough, and the reason why we decided to continue interviewing the wives alone, the women were able to outline the steps they and their husbands had gone through in deciding how many children to have and when. Our study, while primarily using wives for information, does not assume that the information the wives gave to us about their own attitudes and behavior could be used to make comments about their husbands'. It is unfortunate we were unable to include more husbands within our study and in future research we would make a greater effort to deal with them (possibly by contacting couples through the husband) but we feel that there was enough to be gained from our study in spite of this drawback with the sample.

2.3 The Research Schedule

To some extent, every study is only as good as the questions it asks, and the problems of schedule design are legend. As Cannell and Kahn (1954) point out, the main function of any questionnaire is to translate the research objectives into specific questions and to assist the interviewer in motivating the respondent to communicate the required information. The aim of our questionnaire was to build up a picture of the couple and their family-building experiences. In order to do this, we explained to the respondents that we wanted to hear about their experiences in having their present family, what their future fertility intentions were, and some general information about themselves and their spouses. There was a questionnaire from which we worked (a copy is presented in Appendix B), but we found that many questions were answered without the necessity of asking them specifically. Thus, we interviewed from the basis of the questionnaire, but allowed respondents to direct the conversation along their own lines so that the schedule was filled in to suit their own order of preference. Questions were asked and the conversation directed only when the respondent was getting well off the topic or when a particular concern had been fully covered.

The subjects covered in the interview -- in the order they appeared on the interview schedule -- were:

a. family size preferences and expectations at various stages in the marriage, including future fertility intentions;

b. occupational behavior of the husband and wife throughout the marriage, including the wife's future occupational plans and desires;

c. the marital relationship with emphasis on leisure pursuits and companionship;

d. each pregnancy, particularly the factors leading to the decision (or lack thereof) to have a child and the happiness with its spacing;

e. birth control behavior at various stages in the marriage, including future contraceptive intentions; and

f. background factors.

There were also six sets of attitudinal statements that we asked each respondent to agree or disagree with. These were scattered throughout the interview; whenever a natural pause seemed to develop, the interview was halted and the respondent was asked to check in her responses. We were worried that these sets of attitudinal statements might disrupt the flow of the interview, but in practice they helped build rapport. Breaking the interview various times allowed the respondent to do various small chores such as check her children, refill our coffee cups, or get dinner in the oven. Without these breaks, the respondent may well have felt the interview was stretching too long and been more reticient in her answers.

Each interview averaged between an hour and an hour and a half to complete. We normally chatted with the women both before and after the interview, so that we were in their homes for approximately two hours. In

those cases where we could not complete the schedule in one sitting (for example, unexpected company arrived or the children were acting-up to such a degree that the mother could not concentrate), arrangements were made for a second visit. All the respondents had been seen for approximately fifteen minutes in the hospital, where information on their pregnancies and some background factors had been obtained, and they were interviewed in their homes when their babies were between six and eight weeks old.

All the interviews were tape recorded -- we had decided during the pre-test stage that this was the only way we could probe the respondents' answers and keep the interview progressing satisfactorily. After a disastrous attempt at note-taking, we had to agree with Dean, Eichhorn and Dean (1967: 296-297) that "note-taking is more likely to interfere with the interviewer than the informant. He needs all his wits about him to guide the interview, ask penetrating questions that will draw out significant data, and maintain a friendly relationship with the informant". Each respondent was asked if we could use the tape recorder; none said "absolutely not" and most seemed oblivious to it. A few were less than happy with the tape recorder and, for them, we left it on but put it in a bag at our feet. This seemed to satisfy them and the tapes were largely understandable[11].

2.4 Methods of Analysis

The task of transcribing the tapes was undertaken, by ourselves, during the interview period. We found that the process was quickest (and the transcriptions most accurate) if the tape was transcribed immediately after the interview, and this was our aim. There were times when we fell behind our schedule, although by never more than a week. It took between six and eight hours to transcribe each tape and we always ended the transcription by writing out our comments on the respondent and the interview situation.

After the tapes had been transcribed, two approaches were taken to their analysis. We began with a quantitative examination -- each of the major topics the interview covered was coded and examined for its influence on the timing and spacing of the couples' two children and their future fertility intentions.

There are several approaches to the quantitative analysis of interview data. On one hand, every item or index can be intercorrelated and significant relationships given *ad hoc* explanations; on the other hand, a set of hypotheses can be delineated and then explicitly tested and accepted or rejected. We attempted to take a middle path. There were relationships between variables that the previous literature had suggested which we investigated and then our analysis itself suggested further relationships that we attempted to test. The coding of variables reflected this approach to the analysis of the

data. The coding was done question by question -- that is, we coded one question for all interviews, then proceeded to the second question, and so on. This was done, initially, so that there would be no tendency on our part to make a respondent's answers inherently consistent and, secondly, because we began analysing the data before we had finished coding all of the possible variables. The analysis and coding were quite interdependent. As our analysis revealed new avenues to investigate, we would code the suitable variables. The statistical package SPSS was used in connection with the quantitative analysis and the results are to be found in Part II of the thesis[12]. How the variables were coded is discussed as they are introduced into the analysis.

Alongside the quantitative analysis of the data, we proceeded with a qualitative, "interpretive" analysis. By this we mean that we sought patterns in the data from reading the interviews as units. We had had much less experience with this type of operation and found it challenging both to carry out and to write up. While there are numerous empirical accounts of qualitative studies[13] and prescriptions on how to carry out their analyses[14], we found it a difficult and often frustrating task.

We began the qualitative analysis by drawing up lists of recurrent themes and ideas about family formation strategies that we had noticed whilst we were undertaking the quantitative analysis. Whether this knowledge came from the quantitative analysis itself, or from the fact

that it had involved us in reading and re-reading the interviews many times, we never were able to determine. It was probably both, but we would suggest that a completely thorough acquaintance with the data is an essential prerequisite for an interpretive understanding. We then went back to the transcripts and went through each one copying out stretches of conversation which mentioned these themes. At this stage we had to narrow down some of our interests -- the task before us was assuming gargantuan proportions -- and so we selected one or two themes concerning each family formation stage to proceed with. We then categorised and subcategorised the stretches of conversation into some organisational framework. At this stage we introduced various background considerations and saw whether or not they were systematically related to the categorisations we had developed.

Writing up this qualitative analysis was the final task and this involved further difficulties. With the quantitative analysis, results could easily be displayed in the form of tables and charts. This was not so with the qualitative analysis. Backett (1977) mentioned this problem in regards to her research; because the qualitative research worker must turn to extensive quotation to provide "proof", the written report can quickly become very tedious. A further problem we felt was that the written report tended to become a descriptive exercise rather than a sociological analysis. However, we proceeded the best we could and the results are presented

in Part III. They are organised around the three fertility decisions our couples have taken -- spacing to the first child, spacing to the second child and future fertility intentions. Before we begin the presentation of the results of our analysis, however, we shall provide a brief demographic description of the fertility trends of Canadian and Albertan couples. We shall also present in that chapter a description of our sample in terms of their family building behavior and their stated future fertility intentions.

CHAPTER THREE DEMOGRAPHIC BACKGROUND TO THE STUDY

In this last chapter of the Introductory Section, we shall present a brief demographic description of the fertility trends of Canadian and Albertan couples. We shall then provide a description of our sample in terms of their family building behavior and their stated future fertility intentions. The purpose of beginning the analysis this way is to place our study in its wider context.

3.1 Fertility Trends in Canada and Alberta

Canada, like most developed countries, witnessed a fall in its birth rate from the turn of the century[1]. As with other developed countries, there was a slight increase in birth rates between 1947 and 1959, commonly referred to as the "baby boom", but, by and large, the trend has been downward. In 1959, for instance, the general fertility rate in Canada (live births per 1000 women aged 15 - 49) was 119.39. Since then the rate has fallen; it was 73.99 in 1969, 59.96 in 1973 and 56.67 in 1976.

The Albertan general fertility rate has followed the Canadian pattern throughout the century, although it has traditionally, and continues to be, slightly higher than the Canadian average. The general fertility rate peaked in Alberta in 1955 at 135.24. Since then it has also fallen -- to 84.83 in 1969, 68.22 in 1973 and 64.21 in 1976.

Demographers have debated whether the current fer-

tility decline is due to a postponement of births, which is an aspect of timing of fertility, or to the fact that couples, currently of reproductive ages, intend to have fewer children than their predecessors, thereby curtailing their family size. In this regard, changes in age-specific fertility rates, births to mothers of various ages and births of various birth orders are relevant. Also of concern[2] are marriage rates (both rates per 1000 population and average ages at marriage). We shall consider each in turn.

The downward trend in fertility can be seen quite clearly when age-specific fertility rates are examined. From the "baby boom" peak in the mid-1950's, rates for women of all ages have fallen quite dramatically. In very recent years, there has been a slight increase in the rates for women aged 25 - 29, 30 - 34 and 35 - 39, but the trend is so slight, and so recent, that it is difficult to determine its stability or relevance. Table 3.1 summarizes the rates for the years 1955, 1966, 1974, 1975 and 1976 for Canadian and Albertan women.

Table 3.1 Age-Specific Fertility Rates, Canada and Alberta

CANADA * Age Groups	1955	1966	1974	1975	1976
15 - 19	54.2	48.2	35.3	35.3	33.4
20 - 24	218.3	169.1	113.1	112.7	110.3
25 - 29	215.1	163.5	131.1	131.2	129.9
30 - 34	153.8	103.3	66.6	64.4	65.6
35 - 39	89.8	57.5	23.0	21.6	21.1
40 - 44	32.3	19.1	5.5	4.8	4.3
45 - 49	2.9	1.7	0.4	0.4	0.3

Table 3.1 continued over . . .

Table 3.1 (continued)

ALBERTA

* Age Groups	1955	1966	1974	1975	1976
15 - 19	72.7	65.0	47.7	49.7	44.5
20 - 24	275.8	196.7	140.4	142.6	130.7
25 - 29	242.4	168.6	142.2	138.9	140.8
30 - 34	167.0	103.9	64.3	64.6	66.5
35 - 39	92.4	58.4	21.8	20.2	21.0
40 - 44	33.3	19.0	5.2	4.9	4.2
45 - 49	3.1	1.7	0.4	0.4	0.4

* Data presented in tables are fertility rates per 1000 total women by age groups.

These changes in the fertility rate can be further seen by examining the changes in the percent of live births to mothers of various ages through time. For instance, in 1961 in Alberta (the Canadian data show similar patterns and thus will not be presented), 12.5 percent of all live births were to women thirty-five years of age or older. In 1976, the corresponding percent was 3.9. During the same time, the percentage of births to women aged 20 - 24 and 25 - 29 years increased. In 1961, 32.0 percent of all live births in Alberta were to women aged 20 - 24 years and 27.4 percent were to women aged 25 - 29 years. In 1976, 36.1 percent of all live births in Alberta were to women aged 20 - 24 years and 34.4 percent were to women aged 25 - 29 years. The percent of births to very young women also increased during this time. In 1961, 10.6 percent of all live births in Alberta were to women under the age of twenty. In 1976, 12.8 percent of all births were to women this young.

The trend in Canada and Alberta thus appears to be towards smaller families born to women when they are under the age of thirty. We can be more specific than this, however. Evidence of the movement towards a two child family can be seen by examining the changes in the percent of live births of various birth orders over time. Again only the Albertan data will be presented, as the Canadian statistics follow similar patterns. In 1951, 14.1 percent of all live births in Alberta were of the fifth birth order or greater. In 1974, only 5.1 percent of all live births were of this birth order. Conversely, 29.4 percent of births were first births in 1951, while in 1974, 40 percent of all births were first births. The percentage of births that were second births also increased between 1951 and 1974 -- from 28.0 percent to 34.2 percent. Third and fourth births decreased in relative frequency of occurrence. In 1951, 18.3 percent of all live births in Alberta were third births and 10.1 percent were fourth births. In 1974, conversely, 15.0 percent of all live births were third births and 5.6 percent were fourth births.

The marriage rate in both Canada and Alberta has fallen in recent years although it remains higher than its previous trough in the 1960's. In Canada, for example, the general marriage rate (marriages per 1000 population) fell to 6.9 in 1963. From there, it rose to its peak in 1972 at 9.2 and has since been falling -- it was 8.9 in 1974 and 8.4 in 1976. The Albertan general marriage rate has followed the Canadian trend although, as was

the case with the fertility rates, generally shows higher figures. The general marriage rate in Alberta peaked in 1972 at 9.9 and has since fallen to 9.7 in 1976.

Mean ages at marriage for bachelors and spinsters have also been showing recent increases. For Canada, the mean age at marriage for spinster brides was lowest in 1972 when it was 22.2. It has since risen to 22.3 in 1974 and 22.7 in 1976. The mean age for bachelor bridegrooms was also lowest in 1972 at 24.7 and has since risen to 25.0. Albertan brides and bridegrooms, by and large, marry younger than their Canadian counterparts, but they have been following the same changes in trends. The mean age at marriage for spinster brides was lowest in Alberta in 1972 when it was 21.6. It had risen to 22.1 by 1976. For bachelor bridegrooms, the lowest average age at marriage was recorded in 1972 at 24.4. In 1976, it had risen to 24.7.

To sum up, the recent demographic trends in Canada and Alberta have been:

1. A fall in the birth rate amongst women of all ages (although there may be a slight increase in recent years amongst women aged 25 - 29, 30 - 34 and 35 - 39).
2. A fall in the proportion of births to women over the age of thirty-five.
3. An increase in the proportion of births which are first or second births.
4. A falling, but still relatively high marriage rate.
5. An increasing average age at marriage.

From this compendium of trends it is difficult to draw firm conclusions to the demographers' debates -- to decide whether the fall in the birth rate represents a postponement of births and/or whether it represents a decrease in average family size. This is largely because the current fertility decline is still too novel a phenomenon, and because we lack the proper time perspective to comprehend the extent and nature of changes in the procreative behaviors that are taking place in the society. It is hoped, however, that this study will help, in some small way, to shed light on recent fertility trends.

3.2 Family Building Behavior of Our Sample[3]

As we previously mentioned, our sample was composed of one hundred and five couples. Of the one hundred and five, ninety-nine were married to their present spouse at the time their first child was born. The average age at marriage for these wives was 20.9, for the husbands it was 23.2. Three couples married between the births of their two children and the other three women had their first child with somebody other than the father of their second child. One of these women had her first child illegitimately; the other two had been divorced between its birth and the birth of their second child. A total of three women and seven men had been divorced; however, other than the two cases mentioned above, no children from a prior marriage were living with our sample couples.

The average interval between marriage and the first live-born delivery[4] was two years and five months. The average age of the women at first birth was 22.98 and the average age of their husbands[5] was 26.1. Excluding those six women not married to their present husbands at the time of the first birth, the exact breakdown of the interval between marriage and the first child was as follows.

Interval Between Marriage and First Child	N
Up to and including 8 months	22
Over 8 months, up to and including 2 years	25
Over 2 years, up to and including 3 years	20
Over 3 years, up to and including 4 years	15
Over 4 years	17

The average interval between first and second child[6] was two years and seven months. The average age of the mothers at the birth of their second child was 25.6 and the average age of the fathers was 27.8. The exact breakdown of the interval between first and second child was as follows.

Interval Between First and Second Child	N
Up to and including 18 months	16
Over 18 months, up to and including 2 years	28
Over 2 years, up to and including 30 months	23
Over 30 months, up to and including 3 years	17
Over 3 years	21

The average interval from marriage to the second birth was four years and eleven months. Over 60 percent of the couples had had their second child by the fifth year of their marriage. For only 19 percent was there a span longer than six years. The shortest interval from marriage to the second birth was one year; the longest was fourteen years and six months.

In order to determine the family size the couples regarded as most likely for themselves, we asked the women a number of questions.

1. You now have two children. Would you say you definitely will have more children, you probably will, you're uncertain, you probably will not have more children or you definitely will not? What makes you think this?
2. Do you feel you would like to have more children some time? Do you think you will? If so, how many?
3. What do you think will be the largest number of children you will have? And the smallest? How certain of this are you?

We found -- not unexpectedly in light of the available statistical data -- that most people (fifty-two of our couples) wanted, and thought they would have, two children. The next most likely family size, chosen by twenty-one couples, was "two or three", with the distribution of anticipated larger family sizes as follows:

	N
3	7
3 or 4	12
4	5
4 or 5	1
2, 3 or 4	4
3, 4 or 5	1
God's choice	1

Nobody wanted (or thought they would have) a particularly large family -- over 75 percent of the sample were planning on at most three children. If the couple was planning to have more than two children, then it was most likely that they were thinking in terms of no more than three or four. In fact, the only respondent who felt she might have more than five children would not, for religious reasons, use any form of birth control. For her, family size was "however many that come". The strong downward trend in anticipated family size within one generation can be clearly seen when you consider that 69 percent of our wives and 53 percent of their husbands came from families of four or more.

Eighteen of our couples were definitely not going to be having further children, at least with their present spouses -- either the wife had been sterilized or the husband had had a vasectomy. Another twenty said they definitely did not want any more children and could think of no circumstances under which they might change their minds. Most were quite prepared to undergo sterilization and it was simply a matter of finding a doctor that would help them. A further seventeen respondents were fairly sure they would have no further children but, in the words of one, "I wouldn't want to sign anything in blood. Neither of us are rushing out to get something done". Most felt, though, that they would have a third child only if one of their present children should die, or if they remarried and wanted children with their new spouse.

Looking at the other side of the fertility decision, thirteen couples said they were definitely planning to have more children and fourteen thought it highly likely they would be adding to their present family. The remaining twenty-three couples were undecided about the possibility of further children -- they were unable to tell us if they would or would not be adding to their families. Most were quite able to outline the push and pull factors for a third child, and it was usually a matter of having to "wait and see".

In this last chapter of the Introductory Section, we have outlined Canadian and Albertan fertility trends and our couples' patterns of family formation and their stated intentions regarding a third child. We have seen that most couples (Canadian, Albertan and Edmontonian) are planning on having (and are having) two children. In the following chapters, we intend to examine these trends in more detail -- to consider why most couples want, and are planning to have, a family of two (and why those with larger family intentions are anticipating larger families), in the hopes of coming to a clearer understanding of recent (and future) fertility trends.

PART II FUTURE FERTILITY INTENTIONS AND FAMILY BUILDING BEHAVIOR

CHAPTER FOUR ANTICIPATED FAMILY SIZE

The theoretical framework used in this thesis sees fertility behavior as working through three factors: the demand for children, the perceived output of children, and the costs of fertility control. In this and the following chapter we shall look at the demand for children. We shall consider how a couple's income, the costs they see attached to having and raising a family and their tastes for children influence their intentions regarding a third child and the spacing of their present two children. In the chapter following, the perceived output of children -- that is, the number of children couples feel they would have if they did not deliberately control their fertility -- will be considered. In the final chapter of Part II, contraception will be examined -- how the subjective and objective costs involved in couples learning about and using the different contraceptive techniques influence their fertility behavior.

To begin the quantitative analysis, we shall examine the couple's desire for a given number of children. This is the traditional "problem" in fertility analyses[1], with the traditional dependent variables being ideal, desired, expected or actual family size. We have mentioned previously that we have found none of these to be entirely successful. The major problem, we would

argue, stems from the idea inherent in these dependent variables that couples have a reproductive target in mind; that is, they know in the early stages of their marriage how many children they intend to have. Our analysis suggests that couples are more apt to "play it by ear". There are, though, in addition, problems intrinsic to the measures themselves. We shall outline some of these before returning to a discussion of our dependent variable.

The major problem with ideal family size, if used to measure completed fertility, is that it overlooks the conceptual distinction between ideal family size and the number of children desired. Arthur Campbell points this out (1969: 34): "A major limitation of responses to questions on ideal family size is that they do not necessarily reflect personal family size desires. Questions concerning ideal family size usually ask for the respondent's opinion about how many children he or she thinks the average family should have". Underscoring this conceptual difference is the discrepancy researchers such as Freedman, Baumert and Bolte (1959), Woolf (1971), and Namboodiri (1972a) have found between what women consider to be the "ideal family size" and how many children they themselves expect to have.

Current family size has occasionally been used[2] to overcome the problems associated with ideal family size. The obvious difficulty with this measure, though, if it is being used to estimate completed fertility, is that

it cannot be specified without error until a woman reaches the end of her childbearing life. One is faced with either considering only women past the childbearing age (a greatly reduced subsample with potentially poor memories of past fertility decisions and events surrounding such decisions) or in some way removing the effects of age and marital status. Beaujot (1975) suggests measuring current fertility as the difference between the actual fertility to a woman and the mean family size for women her age and marital status. This method enables one to use all members of the sample, but it also has its disadvantages. Any measure of current family size faces the problem that some of the women may have more children than they desire because of inadequate knowledge or use of contraception[3] or fewer children than they desire because of sub-fecundity. This first possibility is particularly problematic because differential knowledge of contraception is probably related to social class. One possible way around this problem, and the solution Beaujot employed, is to ask if each child was wanted and subtract the unwanted births from the current family size. Needless to say, there are problems both in the assumption that births are classifiable into a dichotomy of "wanted" and "unwanted" (our data would suggest that such a dichotomy does not exist) and because, as Ryder suggests (1973a: 503): "conceivably we are measuring not so much the incidence of unwanted births as the extent to which the couple can summon up the resources necessary to cope

with and rationalize such occurrences". This correction also does not solve the problems associated with sub-fecundity.

In accounting for why empirical applications of his theory were not always supportive, Becker (1960) emphasised the problematic influence of inadequate contraceptive knowledge. He suggested that desired rather than actual family size be used in testing the model but, again, there are difficulties. The literature shows that expected family size is a good predictor of completed fertility in the aggregate but a poor indicator when individual woman are considered separately. In the Princeton study, for example, the wife's desired family size six months after the second birth (i.e. at the time of the first interview) proved to be the strongest predictor of fertility over the next three years (Westoff, Potter and Sagi, 1963: 236). However, some two-fifths of the women gave differing responses at the first and third interviews. Moreover, responses to question variations such as "If you were to live your life all over again, how many children would you like to have?" may be influenced by the number of children the respondent already has (George, 1973: 357). Most people do not like to admit that they are dissatisfied with their own present performance.

These traditional dependent variables, then, have problems over and above our major criticism of them. It was this major criticism, however, which led us to

look for alternative dependent variables. We were not convinced that couples adopt at the beginning of their marriages "a utility-maximizing lifetime plan for child-bearing, for expenditures of time and money on children, and for other sources of parental satisfaction not related to children" (Willis, 1973: S17). Hence, we did not feel their family size intentions could adequately be summed up in a measure such as desired or expected total family size. Our experience suggested to us that family size decision making was highly situational and this was confirmed to us when we began the pre-tests. Three examples from our data at that stage should indicate this. All were in response to the question of how many children the couple wanted or intended to have in the future.

(R with boy and girl) (Do you think you will have more children in the future?) I don't think so. My husband says no and I say no, but if something happened to one of these, I would have another one. Or if I were to get pregnant, then I would have it.

(R with two girls) I'm undecided and probably undecided for three or four years. I'm thinking now of having a third, but I don't know. I really had a rough time with this one and she isn't a very good baby, so I'm really thinking about it. I'd like to try for a boy, but . . .

(R with two girls) At least one more, possibly two. It depends how money is. And if we get into a bigger house -- this one only has two bedrooms. I think four would be the very most.

With this personal dislike of the traditional dependent variables, we read Namboodiri's 1972a article. In this article, Namboodiri (1972a: 198) argued against "considering family size as the decision problem in the economic analysis of fertility" and for "fertility

decisions taken at different points in time, and the success or failure in carrying out those decisions . . . to be considered as dependent variables". As he suggested (1972a: 198-199), "at any point in time, for a couple at parity n, the decision problem is whether to have a child of parity n + 1". This captured for us the sequential nature of family formation and allowed us to consider each birth interval as a decision point. That is, rather than using family size per se as the dependent variable, we decided to use -- in line with Namboodiri -- the probability of adding a child (or children) to a family at parity two. Also, because we were interested in how families were formed, we decided to have the couples look back and reconstruct the decisions (or lack thereof) that went into having their first and second child. Because we were considering only couples who have had two children, we were not able to consider "the probability of adding a or another child to the family at zero-parity and parity one", rather, we had to be content with an analysis of the factors and circumstances which went into each of these parity progressions.

In this chapter we shall consider the first dependent variable -- the probability of couples with two children having a third child. The variable was measured by examining the woman's discussion on whether or not, and under what circumstances, she would have a third child. It was coded into three categories (which were outlined in Chapter Three, section two): definitely or probably

will not, definitely or probably will and undecided. The definitely or probably will not category numbered fifty-five and consisted of those couples who had been sterilized, or were planning to be sterilized or who thought it very unlikely that they would have a third child. The definitely or probably will category numbered twenty-seven and consisted of those people who were fairly or positively sure they would be having an additional child. The remaining twenty-three couples were coded as undecided -- they did not know when we interviewed them whether or not they would be adding to their present family.

Our analysis will proceed through income, price and taste variables. We shall begin, however, by considering the influence of the three background and control variables age at marriage, religion and social class. Our fourth control variable -- wife's education -- will be introduced into our analysis when we discuss the taste variable "sex-role norms and behavior". In one sense, our control variables are "taste" variables in that they are factors which influence a couple's "desire" or "taste" for a given number of children. They are, however, of a different nature to the factors we discuss as tastes. In the first instance, they are temporally prior to our taste variables. That is, in any causal sequencing they would "come before" our taste variables. The result of this, and the second distinguishing feature of the control variables, is that they "influence" our taste variables --

that is, they are taste-shaping factors. It is because of their (potential) influence on our taste variables that we use these variables as control variables.

4.1 Background and Control Variables

Age at marriage has consistently been shown in previous fertility studies to influence family size; Peel (1970, 1972), Cartwright (1976) and Westoff and Ryder (1977), for instance, all reported that as wife's age at marriage increased, intended family size decreased. Westoff and Ryder, in fact, found that age at marriage was the best single predictor of fertility uncovered in the 1970 National Fertility Study -- there was a strong negative association of both wanted and unwanted fertility with age at marriage. There has been, though, no simple understanding of why there should be this relationship between the two variables. Busfield outlined two possible explanatory hypotheses in the following:

> It would appear that the relation is not entirely a "spurious" one, and that age at marriage still has some direct causal effect on the family size, through the operation of factors such as fecundity, particularly in accounting for the low fertility of those who marry over 30. On the other hand, there is an important separation of the two variables, and it is clear that contraception within marriage has enabled couples to marry young and yet have small families. The evidence indicates that an important part of the association between age at marriage and family size is due to differences in the efficiency of fertility control within marriage, those who marry young being more likely to be more inefficient. It is possible that such inefficiency may, in part, be a function of the wife's age as well as of selection of more inefficient couples into the young age at marriage groups.
>
> Busfield, 1972: 117

Bumpass (1969) and Ineichen (1976) suggested a third explanation for the effect age at marriage has on fertility -- women marrying when they are older have more alternatives to the mother role and hence a greater investment in limiting their family size. Westoff and Ryder (1977: 338) concluded that likely all factors have an influence on the relationship: "The reason that age at marriage exerts such an influence on fertility is that it combines mutually reinforcing biological and sociological selective factors such as fecundability and education".

Our data, which are presented in Table 4.1, are somewhat in line with the bulk of the previous literature, but suggest that the explanation needs to be expanded. We divided wife's age at marriage into three categories for the analysis: under the age of twenty, twenty and twenty-one, and twenty-two and older. These categories are close together, but do reflect the narrow range of variation within our sample. Moreover, using these narrow divisions does capture the nature of the relationship between the wife's age at marriage and future fertility intentions that was apparent when wife's age at marriage was not collapsed.

Table 4.1 Wife's Age at Marriage by Future Fertility Intentions

Future Fertility Intentions	Wife's Age at Marriage		
	Under 20	20, 21	22 and Older
Definitely/Probably No More Children	44 %	53 %	61 %
Undecided	32	23	9
Definitely/Probably More Children	24	23	30
Total N*	41	30	33

* The total N equals 104 as one couple had not been legally wed at the time of our interview. In this and all tables, 0 percent is used when there are no cases in a particular cell and -- is used when the total N is zero.

The table indicates that couples marrying when the wife was over twenty-one were the most likely to consider their families finished -- 61 percent said it was unlikely they would be having any more than two children as compared with 44 percent of those couples marrying when the wife was under twenty. The interesting aspect of this table, however, was the indication that couples marrying when the wife was under twenty were not definitely planning on having more children, but rather that they were undecided at the moment about their future fertility intentions. The percentage of couples planning definitely to have a third child showed very little relationship with wife's age at marriage. Why the relationship between wife's age at marriage and those definitely or probably not wanting any more children was apparent was because of the large differences in the percent undecided --

32 percent of the women marrying when they were under twenty were undecided about their future fertility intentions versus 9 percent of those marrying when they were twenty-two or older.

An explanation which might help account for these findings was suggested, indirectly, by Cartwright. She found (1976: 113) in her data that a relatively high proportion of mothers in partly skilled and unskilled occupations did not have any clear idea about the number of children they hoped to have. She referred to Askham's (1975) suggestion to account for her finding: "lower working class groups tend to have a present rather than a future time orientation because for them the future is more uncertain and insecure than it is for other social groups . . . their goals will be for present rather than future gratification". In our data there was a strong relationship between social class and wife's age at marriage[4] and hence the explanation about the orientation of working class women might be appropriate here. The women marrying when they were young (who tended to be from the manual social classes) were the most likely to be undecided and this might well have been because they were more oriented to the present and less able to predict whether they would or would not have a third child. We did not measure the present/future time orientation of our couples directly and so we can go no further with this possibility, but it remains an interesting suggestion. The greater percent of those couples marrying when the wife was over twenty-one who knew they would not be

having more children could be explained by the explanations Bumpass, Ineichen and Busfield offered above. Because of mutually reinforcing biological and sociological factors (i.e. their age and possibly more alternatives to the mother role[5]), they were more likely to feel they would not be wanting more than two children.

Religion has traditionally been a very important variable in fertility analyses -- the 1955 and 1960 Growth of American Families Studies, for instance, suggested that religion and the age at which education was completed were the two most important factors in distinguishing between families of different sizes. Its influence, though, appears to be weakening. The 1965 and 1970 National Fertility Studies found a convergence of Catholic and non-Catholic fertility: "the fact of being Catholic is becoming less significant as a factor in shaping attitudes toward fertility . . . and in the practice of contraception itself" (Ryder and Westoff, 1971: 102). In Canada, the differentials between Catholics and Protestants were in the order of 1.3 children in 1941 (Charles, 1948: 68), 0.8 children in 1961 (Henripin, 1968: 342), 0.4 children in the Toronto sample of 1968 (Balakrishnan, Kantner and Allingham, 1975: 31) and even less than this in the Edmonton sample of 1973 (Beaujot, 1975). The Edmonton study also reported that religious attendance had only a weak influence on current family size, although higher values of religiousity were associated with higher fertility amongst Catholics.

Our data, similarly, showed little evidence of a relationship between probability of having a third child and religious affiliation. We divided our sample couples into four religious groupings: Protestant, Catholic, other and no religious affiliation. Protestant included Anglican, Baptist, Lutheran, Mennonite, Pentecostal, Presbyterian, Quaker and United. Catholic included Roman Catholic, Greek Orthodox and Ukranian Catholic. Other included Mormon, Jehovah Witness and the "People's Church". This classification system was based upon religious doctrine; the Protestant religions all see the Bible as the "main authority" in the Church, the Catholic religions value both the Bible and the Church traditions, and the other religions, "Para-Christian" in religious terminology, have some prophet who is accredited equal status to the Bible. This classification system also reflects a difference in attitudes to marital sexual relations. The Catholic and other religious affiliations[6] see the primary purpose of marital sexual relations as procreation. The Protestant religions, on the other hand, are more apt to emphasise the happiness of the couple and, hence, allow (and often encourage) the use of birth control. Table 4.2 presents the relationship between future fertility intentions and both wife's and husband's religious affiliation.

Table 4.2 Religious Affiliation by Future Fertility Intentions

Future Fertility Intentions	Wife's Religious Affiliation			
	Protestant	Catholic	Other	None
Probably/Definitely No More Children	54 %	46 %	50 %	61 %
Undecided	25	27	0	11
Probably/Definitely More Children	21	27	50	28
Total N	44	37	6	18

Future Fertility Intentions	Husband's Religious Affiliation			
	Protestant	Catholic	Other	None
Probably/Definitely No More Children	52 %	53 %	50 %	53 %
Undecided	24	29	0	10
Probably/Definitely More Children	24	18	50	37
Total N	46	34	6	19

Men and women with other religions were more likely than average to be planning an additional child, but this was the only noteworthy occurrence. It was also easily explained; there were only six couples with other religions and two of them were active members of the Mormon Church -- a church which does not allow the use of birth control.

A more refined measure than religious affiliation is religiousity. The reason why any relationship is expected between religious affiliation and family size is because certain Churches promote large families and

proscribe birth control. It is common knowledge, however, that many people "belong" to a Church without any commitment to its doctrines and teachings. Religiosity circumvents this problem by measuring more directly the influence of the religious affiliation.

In our sample, two religions promoted large families and prohibited the use of birth control (Catholic and Mormon) and we hypothesized that couples who belonged to these denominations and attended their services regularly would be most likely to want, and expect to have, large families. That is, we used frequency of church attendance to measure religiosity on the grounds that attendance showed some commitment to a particular Church and provided a basis for exposure to that Church's teachings. We found our hypothesis to be supported, as is indicated in Table 4.3. In this table we consider those couples where both the husband and wife are Catholic or Mormon and investigated the impact of their church attendance on their anticipated family size.

Table 4.3 Religious Attendance by Future Fertility Intentions for Catholic and Mormon Couples

Future Fertility Intentions	Religious Attendance		
	Does Not Attend	Attends Occasionally	Attends Regularly
Probably/Definitely No More Children	64 %	29 %	36 %
Undecided	18	57	18
Probably/Definitely More Children	18	14	46
Total N *	11	7	11

* In only one case did husband and wife not attend church with similar frequency and in this case we coded the couple according to the wife's frequency of attendance

Couples who never attended services were similar to the rest of the sample in their future fertility plans -- 64 percent were not planning to have additional children. Those who attended services but not regularly were undecided about whether or not they would have more children and those who attended services regularly were most apt to be planning on a third child -- 46 percent said they definitely or very likely would be having more children. It thus would appear that whilst the influence of religious affiliation *per se* is declining, active adherence to particular denominations which promote large families[7] still influences fertility intentions.

Turning now to the influence social class has on differential fertility, we shall begin by noting that we adopted the method employed by many social researchers[8] and used the occupation of the husband as the principal indicator of social class background. Although criticisms have been raised of this method of measurement[9], we would argue that it does provide a broad classification of people into the conventional social categories (i.e. middle and working class) and that this broad classification was sufficient for our purposes.

Hawthorn has argued against (1970: 82-83) the use of "social class" or "socio-economic status" in studies of fertility because he feels that as a variable it is "far too crude for causal analysis" -- "it (social class) could be measuring the effects, some of them contradictory, of a host of factors: absolute and relative income and wealth, occupational security, occupational and community

prestige and status, educational experience, consumption patterns and so forth". His point is well taken as many of the influences on fertility appear to be of a very specific nature and may be quite lost in a wide measure such as class. However, the relatively plentiful data on differential fertility by social class can specify questions that need to be asked; the variable has been used, as we mentioned, in many studies and we felt it could provide the start to more detailed analysis in ours.

Using as our social class index husband's occupation, we classified our couples into four groups: professional/ managerial, other non-manual, skilled manual and semi- and unskilled manual. The professional/managerial occupational category was composed of the families of professionals (doctors, teachers) and executives who exercised important managerial authority. Professionals comprised eight percent of the sample (8) and managers thirteen percent (14). There were three students in the sample -- one in education at the University, one a post-graduate student in Chemistry and the third in a business management course in a technological college. For summary purposes, they were included in the first occupational category as that would appear to be where they would eventually find employment. The other non-manual category was composed of the families of white-collar workers who were engaged in more routinized occupations, such as salesmen, order clerks and office supervisors. There were seventeen such couples and they comprised seventeen percent of the sample.

The skilled manual occupational category was composed of the families of workers with some recognised trade (i.e. electrician, plumber). There were twenty-six such couples -- twenty-five percent of the sample. An additional eleven couples (ten percent) were in an apprentice to some recognised trade and they were included in the skilled manual category. The semi- and unskilled manual category was composed of those families where the husband worked at semi- or unskilled jobs such as waiter, janitor or truck driver. This category numbered twenty-six and comprised 25 percent of the sample.

Looking at the influence social class has on differential fertility, we found that the available data seems to indicate a shift from negative to U shaped or positive relations. In Canada, for instance, Charles (1948: 102) documented a negative relationship between occupation and fertility in 1948 and Henripin (1968: 228-229) again found the relation to be negative in the 1950's. In the Toronto sample of 1968, however, the relation was found to be U shaped (Balakrishnan, Kantner and Allingham, 1975: 31). The Alberta study of 1973 also showed a slight U shaped relationship, although the differences were not significant and the conclusion was that there was little relationship between occupation and fertility. Recent British studies (for example, Cartwright, 1976 and Peel, 1970, 1972) which have used father's occupation as an index of social class have reported that their measures of family size vary with social class in a U

or J shape -- those in skilled non-manual occupations want fewest children and those in professional and unskilled manual occupations want the greatest number.

As Table 4.4 indicates, our investigation found little recognisable association between social class (measured by husband's occupation) and the probability of further children. If there was any trend, it was for the relationship to assume an inverse J shape -- the unskilled manual class was the class least likely to be planning more children and the other non-manuals were the most likely to be planning them.

Table 4.4 Social Class by Future Fertility Intentions

Future Fertility Intentions	Occupational Categories			
	Prof.-Man.	Other Non-Manual	Skilled Manual	Unskilled Manual
Probably/Definitely No More Children	60 %	53 %	41 %	62 %
Undecided	16	12	32	19
Probably/Definitely More Children	24	35	27	19
Total N	25	17	37	26

In our earlier discussion of the influence of age at marriage on future fertility intentions we had suggested that the high percentage of women marrying when they were under twenty and who were undecided about their future fertility intentions could be accounted for by their time orientation -- the lower working class groups tend to have a present rather than a future time orientation which makes planning for the future more difficult. On

the face of it, this relationship between social class and future fertility intentions seems to provide evidence against this hypothesis. If it is the lower working class groups who have the greatest tendency to a present time orientation, then surely it should be this group with the greatest percent undecided about their future fertility intentions. The data indicate, however, that it is the skilled manuals who are most likely to be undecided -- 32 percent of them could not say whether they would be having additional children versus 19 percent of the unskilled manuals.

Reading through the interviews, though, made us reluctant to dismiss this time-orientation hypothesis. The relationship between present or future orientation and social class seemed to exist on a wide variety of items -- from casual remarks the women made about how they did their shopping (day to day, usually, for the working classes and week to week for the middle classes) to their ability to predict what they themselves would be doing in five or ten years time. We would suggest that the relationship does hold, but the present time orientation of the women whose husbands had unskilled manual occupations made them feel they would not be having more children while it made the women whose husbands had skilled manual occupations undecided about their future fertility intentions. Women in the unskilled manual category were, by and large, poorly off. Their income and housing was inadequate for two children and thus

when we asked them if they wanted more, they were quick to say no. They could not see forward enough to a time when, possibly, things would be better and they might want more children. Women in the skilled manual category were, on the other hand, a little better off and hence less apt to reject outright further increases in their total family size. With their present orientation, they were "undecided" about their future fertility intentions.

Cartwright, Beaujot and Peel, all of whom suggested a U or J shaped relationship between class and family size, were dealing with women of all parities. It is possible that if we waited until the end of our sample's childbearing years, we too would find a J or U shaped relation. The two manual classes may all decide to have additional children if circumstances change to suit them. This is, however, untestable. Moreover, contraceptive sterilization is, as we shall see, becoming increasingly available to all women in Canada, when they want it. Many of our couples from the manual social classes were deciding on this method and this would effectively curtail any future changes in their fertility intentions.

In this introductory section of the quantitative analysis, we have looked at the relationship between age at marriage, religion and social class and our couples' future fertility intentions. We found that the older a woman married, the more likely she was to feel her family was complete. It was suggested that social and biological factors were the reason behind this; as we progress into

the analysis we shall investigate these suggestions more thoroughly. We found that women who married when they were young tended to come from the manual social categories and these categories were the most likely to be undecided about their future fertility intentions. We accounted for this by Askham's (1975) suggestion about the present time orientation of the working classes -- a time orientation which makes planning for the future difficult. Religious affiliation per se did not influence future fertility intentions, however, active adherence to particular denominations which promoted large families appeared to.

4.2 Income Variables

The relationship between income and fertility has been frequently investigated in the fertility literature. It is widely assumed that fertility should vary positively with income; however, this assumption receives little empirical support from the literature. It is true that over the course of the business cycle the relationship between income and fertility is positive, but most cross-sectional surveys show negative associations[10]. That income ought to influence family growth decisions seems intuitively right. Since income determines the amount of available resources, it seems only natural to assume that families with high incomes will be able to "afford" more children than those doing less well financially. That low income families have almost invariably been

found to have more children than high income families has generally been attributed to "a cultural lag in the acceptance of small families, and in the mastery of the means to attain them" (Coale, 1960: 5).

Since no direct or simple relationship between income and fertility has been uncovered in cross-sectional studies, some sociologists (for example, Blake, 1967; 1968) have argued for the hypothesis to be dismissed. However, as Simon outlines (1969: 341), this argument misunderstands the intricate nature of the economic thesis. Because of the interaction between income and tastes, the thesis can make no a priori predictions about the total effect of income on fertility. That is, since income's effect through tastes could be in either direction, the direct positive effect on fertility could be nullified. More to the point, to conclude that income and fertility need not necessarily be positively related does not imply that the income variable can be ignored all together. As Hawthorn points out (1970: 78-79) "the nature and extent of the offsetting process is an empirical question to be determined afresh for each sample". Moreover, our study found, as have others who have used an open-ended interview technique (see, for instance, Cartwright, 1976), that income ranks highly as a reason women give for both the timing and spacing of their families and for the number of children they desire. The impact of income on fertility decisions must remain part of the analysis.

There are many facets of income that can be investigated[11]. Traditionally, income has been measured as

observed income at one point in time. More recently, Easterlin (1970), following Becker (1965), has argued against this representation of the income concept. He suggests that household decisions, particularly decisions on items involving substantial outlays, are geared to the longer term income prospects of the household. Easterlin argues that the income concept that should be used is potential income flow through time. We would agree that potential income is a factor that couples take into account in their fertility decisions, but would argue that observed income at the present point in time is also a relevant variable, particularly in regards to timing and spacing of children. Its importance can be seen in the example of two couples with similar tastes, price constraints, and both with highly satisfactory potential incomes. One couple may, however, delay the birth of their third child because their present income is, for some passing reason, unacceptable.

In addition to these income concepts, one needs to gauge the anticipated variation of income around the expected trend. Numerous researchers (see, for instance, T. Paul Schultz, 1969 and Namboodiri, 1972b) have pointed out that families that are not reasonably confident of their future income potentials will respond differently to fertility decisions than families that are reasonably confident. Schultz, for example, writes:

> The main source of family income is typically that of the male head of the household. A change in his income may have a variety of effects on parents' desires for children, depending on whether the change

> in income is anticipated and whether it is permanent. Because children represent a long-term irreversible commitment, parents are not likely to respond to a change in income by adjusting the final number of children they want unless they view the change as permanent.
>
> Schultz, 1969: 156

A final income related variable that appears worthy of consideration is relative income. Deborah Freedman (1963) investigated the relationship between economic status and fertility and concluded that husband's income does make a difference in the number of children a couple will have if it is considered in relation to the average income for the husband's occupational status and age. An income that was above average was associated with more children, but being in a higher absolute income class meant fewer children if the higher income was only what was usual. From Freedman's data, it appears that what counts is not income per se but income relative to that of others in one's age, occupational and educational categories. Viewed this way, relative income can be seen as income controlling for selected taste-forming factors.

In our research, observed income at the present point in time was measured through the husband's income. We debated whether to consider the wife's or the family income, but past research has tended to use husband's income. One good reason for this is that it keeps the "income effect" separate from the "substitution effect", which we discuss below. Also, we interviewed our women six to eight weeks after the birth of their child and many were undecided as to whether or not they would be

returning to (or taking up) paid employment. We felt that there would be an unacceptably high level of unreliability if we used family income before the second child was born to measure observed income now. There were too many women changing their employment status between when they had only the one child and now. Certainly, in this day and age, a wife's income can make a very important contribution to the family's standard of living, but, for our sample, we felt it better to continue the analysis using only husband's income[12].

There are always problems in the measurement of income, particularly, as here, when we are considering only the husband's income and when the wife is taken as the source of that information. For this reason, two "proxy measures" were also used. These were a measure of current savings and the respondent's feeling of financial success.

> Suppose your husband lost his job tomorrow and neither you nor he could find work for one month. Do you feel that you could pay all your usual bills for that month out of your family savings? Two months? Three months?
>
> How would you rate your family income at the moment? Would you say it was enough for your needs, more than enough, or less than what you really need?

Potential income flow through time and anticipated variation of income around the expected trend were gauged by the nature of the husband's occupation and education. This was supplemented by questioning the respondent directly on her feelings regarding her family's potential income.

> In about five years time, do you think that your family's standard of living will go up a great deal, go up slightly, be about the same or be worse than it is now?

Relative income was measured by a comparison of the husband's actual income with the income that was to be expected given his age, occupation and education. Again we supplemented the objective measure by questioning the respondent directly on her feelings.

> How would you compare yourself, financially, with your friends? Would you say you are slightly better off than they are, about the same, or worse off, financially, than most of them are?

The respondent was also asked to discuss the reasons why she wanted the number of children she did, and why she decided (if there was a decision involved) to have her children when she did. These open-ended questions were also examined for references to economic influences.

Many researchers have commented on the difficulty of obtaining information on a husband's income from his wife -- either the wife does not know her husband's income, or if she does know, she is not prepared to tell the researcher. Anticipating such difficulties, we presented our wives, at the end of the interview, with a card with seventeen income categories listed on it and asked her to circle first her income group and then her husband's. In practice, few seemed hesitant to circle their income categories and, in fact, in a number of cases, went to considerable lengths to find their old income tax form so as to get the information correct. The range of husbands' incomes was from $4,000 - $4,999

to over $35,000. Four women did not know their husband's income and three couples were in a situation where "annual income before tax" made little sense -- they ran farms or businesses where they "took what they needed" rather than a fixed income. The seventeen income categories were collapsed to four for analysis: under $12,000; $12,000 and over but under $15,000; $15,000 and over but under $20,000; and $20,000 and over. Under $12,000 was chosen as the first category because, in Edmonton, households earning this amount are eligible for public assistance (i.e. subsidized housing, free medical and dental care). The other three categories were decided upon by listing all reported incomes and looking for reasonable breakpoints. Inflation has been so rampant in Canada that our original plan of using Statistics Canada's 1970 Census categories was not feasible.

Those earning under $12,000 were clearly "poor". There were eleven such couples and five were living in subsidized housing. Two were living with parents and two were renting in very old, run-down communities. One couple was buying a condominium (the Canadian equivalent of terraced housing and one of the less expensive forms of housing) with the mortgage subsidized by the city; however, they seemed to be over-reaching their financial limits. The respondent made a number of references to "going under month by month" and both husband and wife were looking for additional work. The eleventh couple owned their home outright but were exceptional in a number

of ways -- they had married in their late thirties and had had both children in their forties. The home had been acquired years previously by the husband. The husband was self-employed and seemed to be easing up on the amount of work he did -- and thus the salary he earned -- so as to finish a University degree and spend time with his new family.

Twenty-eight couples were earning between $12,000 and $15,000. These couples were not as financially poor as the first group, but were far from wealthy. Thirteen of the couples were living in rented accomodation and three were living with parents. The remaining twelve were buying their own homes; however, 58 percent of these homes were in the surrounding towns (where prices are substantially cheaper) and 80 percent of those buying in the city were buying condominiums.

There were thirty-seven couples earning between $15,000 and $20,000 and they appeared to be comfortably well-off. Only five such couples were renting and the rest were buying their own homes. In contrast to those earning $12,000 to $15,000, 75 percent of these couples were buying detached houses and 53 percent of these houses were in the city. Four couples were living on an acreage (a small rural property); the first group where any couple was able to afford to invest in land.

The highest income category was over $20,000 and twenty-two couples were earning this much. They were clearly "well-to-do" -- all but one were buying (or had

bought) their own home and the one couple that was renting were looking to buy. We asked each couple if they owned a washer and dryer, two cars, a freezer and a colour television and in this highest income group, 64 percent owned all commodities. None of the couples in the lowest income category owned all of the commodities and only 27 percent had three. The percentages of people owning all four commodities for income groups $12,000 to $15,000 and $15,000 to $20,000 were 21 percent and 35 percent respectively.

The relationship between husband's income and the probability of having further children is, as we hinted at in the beginning of this section, troubled by the problem of unwanted births. Westoff and Ryder outline the dilemma:

> The basic hypothesis, simply formulated, asserts that the decision to have a child, or an additional child, is a function of the preference for "purchasing" or "investing" in children vs. preferences for other consumer durables, which in turn is a function of resources (discretionary income) vs. competing demands on those resources. The element of uncertainty introduced by an unintended "investment" (an unwanted birth) has been an embarrassment to the decision model implicit in the theory. The traditional finding, that income and fertility are negatively related, has been interpreted as a consequence of this unintended component; if only wanted births were isolated and analyzed, a positive association between income and fertility would emerge.
>
> Westoff and Ryder, 1977: 296

Those studies that have attempted to isolate wanted births have not found, however, a positive association between income and fertility. Beaujot (1975), for instance, found both the wife's income and the family income

to be negatively related to current fertility and Westoff and Ryder (1977: 299) concluded with "the only generalization that can be offered with any assurance within the limits of this analysis is that there is no evidence of a positive correlation between actual income and the number of births wanted for the cohort whose fertility was nearly completed in 1970". Even when Westoff and Ryder (1977) controlled for education (on the grounds that since income and education are directly related, allowing education to vary dilutes the strength of any positive association), they were unable to alter the slight negative relationship of income and wanted fertility. The conclusion in the light of such findings is that no simple association between income and fertility can be predicted -- the association between education and income confounds the relationship, as does the possibility of parents investing in the "quality" of children rather than simply their "quantity".

The relationship between husband's income and the probability of having a third child, for our sample, is outlined in Table 4.5. All births -- wanted and unwanted -- are included.

Table 4.5 Husband's Income by Future Fertility Intentions

Future Fertility Intentions	Husband's Income			
	Under $12,000	$12,000 - $15,000	$15,000 - $20,000	$20,000 and Over
Probably/Definitely No More Children	73 %	46 %	51 %	50 %
Undecided	18	25	19	32
Probably/Definitely More Children	9	29	30	18
Total N *	11	28	37	22

* Total N equals 98 because information could not be obtained from seven women about their husband's income.

As the table indicates, there was some evidence of a positive or inverse U shaped relationship between the two variables. Those earning under $12,000 were the most likely not to be planning further children -- only one such couple thought they would be having a third child and the respondent stressed that this would be "only when we're really set up nice. Where we can afford it". The relationship was not strictly linear, however, as the other three income groups were very similar in their intentions for more children; 46 percent, 51 percent and 50 percent in the income groups $12,000 to $15,000, $15,000 to $20,000 and over $20,000 respectively said they were fairly sure they would be stopping with the two children.

The inverse U shaped relation can be seen if less attention is paid to the majority who wanted only two children and if undecided is taken as a category midway

between definitely no more and definitely more children. Those earning between $12,000 and $15,000 who were not settled on a family of two were almost equally divided between "undecided" and definitely planning more children. Those earning between $15,000 and $20,000 were more apt to feel they would be having a third child, whilst those in the highest income category were the most likely to say they had not yet decided whether or not to have more children. That is, the lowest income group was least likely to be planning more than two children and the $15,000 to $20,000 group were most likely. The highest income group was most likely to be undecided.

These data are difficult to interpret theoretically with any degree of certainty. Education has not been controlled for and all births -- wanted and unwanted -- are included[13]. The evidence appears to suggest, however, that it is the middle income couples who are most likely to be considering a third child. The lower income couples -- possibly because of their lower incomes -- are least likely to be considering more children. This is also the case with the higher income couples -- possibly because of their wider exposure to alternative rewards.

Turning now to relative income, Deborah Freedman (1963: 414), as we mentioned previously, hypothesized that relative income might affect fertility independently of actual income because "the costs of rearing children are related to the socioeconomic reference group of the parents". From her data it appeared that those doing

well in relation to their peers (people of similar age, occupation and education) had more children than those doing poorly. Bernhardt (1972) in a Swedish study found that relative income and fertility were positively related at the higher end of the income scale, but the relationship was reversed at the lower end. Bernhardt had included all births, planned and unplanned, and used this to account for the reason why her data did not entirely support Freedman's. Westoff and Ryder (1977: 301), however, did isolate wanted births and found no support for Freedman's hypothesis -- "substituting relative for absolute income seems to . . . reduce the overall variance of fertility, but not to alter the slight negative relationship of income and wanted fertility".

To investigate the influence of relative income in our data, we looked at the relationship between the likelihood of a third child and income for each of our occupational categories. Because of small cell sizes we present data for only those women who felt they likely would not be having additional children. Table 4.6 presents the results; an asterick (*) marks the modal income category for each occupational category, and total N's are included because cell sizes are so small.

Table 4.6 Percentage of Women Who Feel They Probably or Definitely Will Not Have a Third Child by Social Class and Husband's Income

Husband's Income	Occupational Categories: Prof.-Man.	Other Non-Manual	Skilled Manual	Unskilled Manual
Under $12,000	100 %	100 %	50 %	67 %
$12,000 - $15,000	67 %	33 % *	36 % *	62 %
$15,000 - $20,000	45 % *	67 % *	40 %	75 % *
Over $20,000	67 %	50 %	40 %	50 %

Total N's (= 100 %)

	Prof.-Man.	Other Non-Manual	Skilled Manual	Unskilled Manual
Under $12,000	2	1	2	6
$12,000 - $15,000	3	6	11	8
$15,000 - $20,000	11	6	10	10
Over $20,000	6	4	10	2

* marks modal income class for each occupational category.

When we were looking at the relationship between class and decisions for more children, we found that the unskilled manuals were marginally more likely to feel their families were complete. This appeared to hold regardless of the income they were earning. The modal category for unskilled workers was $15,000 to $20,000 and 75 percent of these couples felt it was likely they would stop with two children. The percentage who felt the same way who earned less than the mode and who earned more than the mode were respectively 62 percent and 50 percent -- little suggestion of support for the relative income hypothesis. The majority of the professional-managerials were also planning on having two children

and, again, relative income, at least when it was measured in this way, did not appear to change this. The modal income category for the professional-managerials was $15,000 to $20,000 and 45 percent of this category anticipated a family of two children. The percent who wanted a family size of two and who earned less ($12,000 to $15,000) increased to 67 percent but so too did the percent of those earning over $20,000. This and the other data in the table indicated anything but support for a relative income hypothesis[14].

This finding was reinforced when we looked at the relationship between the probability of a third child and the respondent's <u>feelings</u> about her income in relation to the income of her friends. This was likely to be a better measure of relative income, but because we did not collect systematic data on the average family size of the respondent's friends, the rejection of the relative income hypothesis must be undertaken with care. Table 4.7 presents the results; thirteen couples had to be excluded because the wife said they had friends both better and worse off than themselves.

Table 4.7 Relative Standard of Living by Future Fertility Intentions

Future Fertility Intentions	Relative Standard of Living		
	Better Off Than Friends	Same As Friends	Worse Off Than Friends
Probably/Definitely No More Children	67 %	43 %	76 %
Undecided	19	26	12
Probably/Definitely More Children	14	31	12
Total N *	21	54	17

* The total N equals 92 because 13 couples felt they had friends both better off and worse off than themselves.

Those who judged that they were doing better than their friends and those who thought they were doing worse than their friends were pretty sure they would not be having more children. It was those couples who felt they were no better or no worse off than their friends who both wanted more children and who were undecided about their future fertility plans.

A problem arises in using the data in this table to reject the relative income hypothesis because to do so we would have to assume that the average family size of friends is similar for all groups. If we did not, we could be misinterpreting the data. For example, if those who were worse off than their friends nevertheless had friends whose normal family size was four or five, then they might still be expecting to have a third child and yet, in relative terms, end up with fewer children than

their friends. When we were conducting the interviews, most women were asked how many children their friends had and the common answer was two or three. To this extent, the relative income hypothesis is rejected. However, not all women were asked the question and there were exceptions. Some religious groups (i.e. Mormons) had friends with larger families and many of the women who had married when they were teenagers had friends with no children. To this extent, the data can not be used to comment on the relative income hypothesis. The empirical findings do stand, however -- it was the middle income groups which were most likely to consider a third child problematic. The relatively rich and the relatively poor, because of income, differences in tastes or whatever, were most apt to feel their families were complete.

Because we had no independent check of how accurate our wives' estimations of their husbands' incomes were, we asked each respondent two "proxy" questions -- one a measure of current savings and the other a measure of financial success. The current savings question did not differentiate between the sample couples in any recognizable way. There was a very real problem with using this measure with couples at this stage in their marriage -- many were in the midst of buying a house and their savings were, temporarily at least, nonexistent. If they were not buying, they were often looking and would volunteer such comments as "well, we have lots of savings now, but ask me that in a month and it'll be a different story".

If there is any "life-cycle" in the marriages of middle income couples, then buying the first home comes around the time the second child is born. For this reason, this question was not analysed further.

The measure of financial success provides further insight into our previous finding that it is the middle income couples who are either planning or are undecided about larger families. The measure of financial success asked couples if they felt their present income was more than enough, enough or less than they really needed. Table 4.8 presents the results of the cross-tabulation; three women did not answer the question and hence had to be excluded.

Table 4.8 Perceived Adequacy of Income by Future Fertility Intentions

Future Fertility Intentions	Perceived Adequacy of Income		
	Income More Than Enough	Income Enough	Income Less Than Enough
Probably/Definitely No More Children	67 %	49 %	64 %
Undecided	25	20	27
Probably/Definitely More Children	8	30	9
Total N *	12	79	11

* The total N equals 102 because three women felt unable to assess the adequacy of their income.

Whereas 30 percent of those couples who felt their income was enough for their needs were definitely or probably planning more children, only 8 percent of those who felt their income was more than enough and 9 percent

of those who felt their income was less than what they really needed felt this way. The couples who felt their income was just enough were also the least likely to feel their families were definitely or probably completed.

It could be argued that this relationship was simply a function of the relationship between social class and perceived adequacy of income -- because the majority of the professional-managerials felt their income was more than enough and the majority of the unskilled manuals felt their income was less than enough, we really have just replicated the original relationship between social class and future fertility intentions. This does not appear to be the case however. As Table 4.9 indicates, the majority of couples in each social class grouping felt their income was adequate.

Table 4.9 Social Class by Perceived Adequacy of Income

Income Is Felt To Be:	Occupational Categories			
	Prof.-Man.	Other Non-Manual	Skilled Manual	Unskilled Manual
More Than Enough	13 %	6 %	22 %	0 %
Enough	79	94	67	80
Less Than Enough	8	0	11	20
Total N *	24	17	36	25

* The total N equals 102 because three women felt unable to assess the adequacy of their income.

Moreover, when the relationship between perceived adequacy of income and future fertility intentions was controlled

for class it was found to hold to some degree in each occupational grouping[15]. In all categories, the majority of women who felt their income was more than enough and who felt it was less than enough were not planning to have additional children. It was those couples; regardless of their social class grouping who felt their income was enough who were more likely to be planning or undecided about a third child. Amongst the professional-managerials and the unskilled manuals, it is true that the majority who judged their income to be adequate were planning to stop at two children, but there was a sizable minority (much larger than amongst those who felt their income was more or less than what they really needed) who were definitely or probably planning on a third child. It appears that our original finding that it was the middle income couples who were either planning or were undecided about larger families can be elaborated further -- it is those couples who feel their income is not too much and not too little (and who, by and large, have average incomes[16]) who are most likely to be considering a third child.

The last income concept we outlined as potentially important to fertility decision making was the anticipated variation of income. Researchers (for instance, Namboodiri, 1972b and T. Paul Schultz, 1969) had argued that couples, in deciding how many children to have, take into account their long term income prospects. Since children involve continuing expenditures, couples are

more apt to use their anticipated future income than their present income in determining how many children they should have. We measured this concept, as Cartwright (1976) did, by asking the couples if they thought they would be better off, about the same, or worse off in five years time. Cartwright found (1976: 132) that expectations about being better or worse off were unrelated to the sample womens' intentions about having further children. The data for our sample are presented below; six respondents had to be excluded as they were unable to decide what would happen to their standard of living in the future.

Table 4.10 Anticipated Income Trend by Future Fertility Intentions

Future Fertility Intentions	In 5 Years Your Standard of Living Should? Go Up A Great Deal	Go Up Slightly	Remain the Same	Become Worse
Probably/Definitely No More Children	58 %	54 %	55 %	0 %
Undecided	16	25	17	0
Probably/Definitely More Children	26	21	28	100
Total N *	19	61	18	1

* The total N equals 99 because six women were unable to decide what would happen to their standard of living in the future.

The table indicates, as Cartwright's data did, that there is no relationship between the anticipated income trend, at least as it was measured here, and future fertility intentions -- 58 percent, 54 percent and 55 percent of the couples who felt that in the next five

years their standard of living would go up greatly, go up slightly, and remain the same respectively were fairly sure they would not be having additional children. We are, however, hesitant to use this data to reject the hypothesis that a couple's anticipated future income trend influences their probability of having a third child. Only one person thought her family's standard of living would be lower in five years than it was now and this was <u>because</u> she wanted a third and possibly a fourth child. She knew that in five years she would definitely have three children and thus not be able to continue working -- she trusted only her mother to babysit and her mother had told her she was prepared to take care of no more than two children. Comments the occasional woman would make -- for example, from a woman whose husband was still at University, "We had the knowledge that when he did finish school, money hopefully would not be a problem. It wasn't as if we thought we were going to be poor all of our lives." -- suggested that the variable did have an influence, but that our measure was not tapping it.

The results of the qualitative analysis of the comments that the women made regarding their families are forthcoming in Part III, but we shall point out here some of our findings on the income variable. When we reviewed the women's comments on why they wanted a particular family size, an interesting paradox emerged -- 67 percent of the women mentioned economic factors as an influence on their family size decision making, and yet 76 percent were quite adamant that they would not have more children

than they were presently planning if they were substantially richer. Again and again, women would make the following type of comment:

> (Do economic factors play any part in your family size?) Yes, yes they do. We're farmers and we're not doing that well. We were in pigs and we lost quite a few. We're just recuperating now. And we've just got a two bedroom house and we'll have to build on eventually . . .. (If wealthier, would you have more children?) No, definitely no. I didn't mind being pregnant, the only thing I didn't like about being pregnant was being fat. That really, really, really bothered me. And I just don't want to go through all that again. (So even if you could afford more children, you wouldn't be willing to have them?) Right.
>
> (Why two children?) It's what we can afford. We have a three bedroom condo and that gives them a bedroom each and that's what my husband's salary can afford. We can afford to feed them and clothe them and that's the important things. (If wealthier, would you have had more children?) I don't think so. My husband comes from a family of two and I come from a family of three and that's all we know, so we like small families.
>
> (Why two children?) Well, financially, that's what we feel we can afford. (Would you have more children if you were wealthier?) No, I don't think so, no. I'm really satisfied with two kids. Everybody has their limit as to what they can handle and I think I'd be pushing myself as far as patience and being able to give them both the attention we want them to have.

It appears that for various reasons couples had decided they wanted two children, and then they <u>perceived</u> economic factors as influencing that decision. However, economic factors did not appear to act in any direct way on individuals. As we mentioned above, over 75 percent of the respondents said they would not have more children if they were wealthier and, when asked how many children they could afford, an equally high percentage gave a figure higher than what they actually planned. It is

entirely plausible (and we would argue quite likely) that economic interpretations were seen by the women as good rationales to give to the interviewer -- and to use for themselves -- to account for complex and probably not fully examined series of decisions and actions. Thus, although many people appeared to see money as a major factor in their decisions about a third child, the data indicated that its influence was far from direct. Cartwright (1976) found a similar paradox in her data and her summary paragraph captures our conclusion:

> It is difficult to make sense of these findings without being wildly speculative. It may be that when mothers said they did not want more children, or only wanted two children because of the expense, this is more a reflection of cultural norms and expectations than of their own individual situation. For various reasons they had decided they wanted two children and they perceived economic factors as influencing that decision, but there is no evidence from this study to show that economic pressures act in any direct way on individuals.
>
> Cartwright, 1976: 128

In this section of the thesis we have examined the influence of a variety of economic factors on the couple's decision regarding a third child. From the comments the women made, it appeared that the income variable would be a very important influence on the decision regarding a third child. The data indicated, however, that its influence was far from direct. The one finding that did emerge from a number of different indicators was that it was the middle income groups who were most likely to be <u>considering</u> a third child. Cartwright (1976) found a similar trend in her data and accounted for it as follows:

> These general economic influences seem more likely to operate on the middle range of families, with those at the two extremes being rather less affected. At one end money and influence may enable families to ignore norms, at the other end, lack of money and influence may mean families do not share the same norms.
>
> Cartwright, 1976: 166

This is one possible explanation; an alternative explanation refers back to our basic hypothesis (Westoff and Ryder, 1977: 296): "The basic hypothesis . . . asserts that the decision to have a child . . . is a function of the preference for "purchasing" . . . children vs. preferences for other consumer durables, which in turn is a function of resources (discretionary income) vs. competing demands on these resources". It could be argued that couples whose income was less than adequate (be it measured through actual income, relative income or perceived adequacy of income) were less likely to want three children because they lacked "resources" or "discretionary income". Further, couples whose income was more than adequate (measured by the same three indicators) were also less likely to want three children but because they had greater "competing demands" on their resources. It was the middle income couples who were the most likely to be in a position to be considering a third child -- they did not have as many competing demands, but they were not as constrained by income. This is, in fact, one of the organising themes of the qualitative analysis and the reader is referred to the fuller discussion in Part III.

Little other than the finding that middle income

couples were most likely to be considering a third child was uncovered in the analysis. We found little support for the relative income hypothesis, although this may well have been due to problems with our measure. This was also the case with the consideration of the influence of long-term income prospects. Our measure showed that this variable had very little impact on the decision for a third child, but our feeling was that this was as likely to do with our indicator as with the variable. Although the qualitative reading of the interviews did not give any indication to support a relative income hypothesis, comments the women made did suggest that a couple's long-term income prospects were a contributing factor in their decision regarding a third child.

4.3 Price Variables

There has been a growing realization in fertility literature[17] that the costs of children must include both the direct outlays required for childbearing and rearing and the indirect (or opportunity) costs involved in the time required for these activities. With respect to direct costs, theorists (see, for instance, Easterlin, 1970; Duesenberry, 1960) have more or less concluded that the minimum expenditure per child that parents can reasonably consider rises with income. There have been some differences of opinion about the reasons for this, but there seems to be growing consensus that the expenditure in any social class is a constraint imposed by

the respective reference groups. For example, Easterlin writes:

> It is sometimes argued . . . that the fact that the rich spend more per child than the poor is indicative of the operation of a differential, higher price constraint, adverse to fertility. . . . Clearly, differences in observed expenditures per child do not necessarily reflect differences in the set of prices constraining household choices, because expenditures contain both price and quantity components. If household incomes or tastes differ, then expenditures per child can vary even if the price tags attached to each potentially relevant quantity is the same for all households, simply because different quantities may be purchased. . . it seems that there has been a tendency to infer that expenditure differences imply price differences, when they really reflect variations in tastes.
>
> Easterlin, 1970: 130-131

Easterlin's argument is that the fact the rich spend more per child than the poor does not necessarily mean the prices of goods are higher for them. The set of prices confronting households is likely more or less uniform for all income groups, and if the rich spend more per child than the poor, then it is no doubt due to differences in tastes. Higher income groups have more expensive tastes -- items such as summer camps, music lessons and advanced education are, for instance, considered mandatory. Thus, under direct costs of children, we need to consider not actual monetary outlays but rather child-quality standards. By this we mean the level of material comfort with which the couple feel it is necessary to provide each of their children[18].

Indirect costs have increasingly been suggested as important considerations in regard to prices. This has primarily been a function of a new version of the economic

theory of fertility, derived chiefly from a 1965 article by Becker and distinguished by the use of a "household production function". This version of fertility theory (typified by the articles in the 1973 (81: 2) Part II edition of the Journal of Political Economy) was "designed primarily to analyze the effects of the differences in the price of the time of parents that enter directly or indirectly into the production of children" (Theodore W. Schultz, 1973: S7). The theory argues that there is a difference in the value of time of mothers in bearing and rearing children associated with the difference in the human capital of mothers -- well-educated mothers (using education as a measure of potential earnings) stand to lose more, in economic terms, by having children.

This version of the economic theory of fertility has come under increasing attack by both economists and sociologists. For example, Gronau writes:

> The adage "time is money" has, since Becker's path-breaking article of 1965, become a part of economic theory. The answer to the question, "How much money is time?" leads, however, a shaky life within the framework of economic analysis. More and more economists . . . have come to question the traditional answer that the value one places on his time is equal to the person's marginal wage rate. This contention drew fire from two directions -- from those arguing that this equality ignores any possible differentials between the direct utilities associated with work and nonwork activities, and from those attacking the presupposition that time can be shifted freely between the market and nonmarket sector.
>
> Gronau, 1973: S170-S171

Both criticisms are relevant to sociologists working on fertility models. With regard to the first criticism, although economists generally admit the existence of a

diversity of preferences with regard to childbearing and working in the market, the theory is developed and the empirical applications are conducted as if all families have the same preferences[19]. This, as Namboodiri has clearly pointed out, is not the case -- the cost of a woman's time is not always determined by market forces.

> Consider a woman who attaches very great importance to participating in activity A (e.g. developing a career) and relatively much less importance to participating in activity B (e.g. having another child). To this woman the cost of time that she may have to take from activity A in order to participate in activity B would be considerably higher than for another woman to whom both the above activities are of equal importance.
>
> Namboodiri, 1972b: 472

This type of reasoning leads us to suggest that in measuring indirect costs we should consider the relative priority attached to bearing and rearing a third child as opposed to participating in extra-familial leisure and work activities, taking into account the desire to work and the ability to find both adequate employment and childminding services. This we consider a taste factor and is discussed in the following section.

There remains the concept of indirect costs intended by the economists. Theoretically, we question whether or not there is such a concept, distinct from the taste concept. However, it has received considerable attention from economists and, thus, we shall attempt some measure of it here. By including such a measure we hope to clarify some of the ambiguities that we feel surround the variable.

Direct costs, as we outlined above, were measured as child-quality standards. Myra Woolf (1971: 105-108), in an English study of family intentions, conducted lengthy unstructured interviews with seventy women about their attitudes and ideas on motherhood, children and the family. From comments made by the women, measures were constructed illustrating four attitudes that might have been related to family size. These measures were then included in the more formal pilot stage of the investigation and answers to the attitude statements were subjected to a factor analysis to see if they combined to form comprehensive indices of attitudes. Items illustrating three attitudes proved quite stable and were included in the final questionnaire. The answers to the relevant questions in the final questionnaire were again factor analysed and when the solution was rotated, resulted in five dimensions which Woolf described as illustrating: (1) children are an encumbrance, (2) there is a concern with overcrowding and overpopulation, (3) material considerations are relevant where children are concerned, (4) motherhood and children are satisfying, (5) children need siblings and training in sharing.

The third dimension -- material conditions -- appeared to be an adequate measure of child-quality standards. It measured how important women thought new clothes, separate bedrooms, a nice home, toys like other children's and individual attention from the parents were for children. We used the first four of these questions(we regarded the fifth question, dealing with the necessity

of spending time with children, as an indirect cost) and introduced a fifth and sixth question on the importance of a backyard and the importance of a yearly holiday. These were two concerns that young Canadian couples had repeatedly mentioned to us when we had informally discussed the topic of "what do children need" with them. Since we wanted the index to include a "behavioral" aspect as well as an "importance" aspect (that is, not only how important the item was, but whether it would be purchased or not), we outlined three response categories for the women to choose from:

a. very important -- the item was so important that they really would not have a child unless the commodity could be provided.

b. important -- the item was important and they would try to provide it for their children, and

c. unimportant -- the item was unimportant and no special attempts would be made to supply it to their children.

Each very important was scored two, each important one and each unimportant zero, so that a composite score for each woman was derived. Half values were allowed as some women felt certain commodities were "halfway between" the various categories. The total scores ranged between twelve and two, and we classified those women scoring 5.5 or less as having low child-quality standards and those scoring above 5.5 as having high child-quality standards. This seemed a reasonable break-point and yielded two roughly equal size categories for our analysis.

The problem with this measure was that it was very difficult to validate; that is, it was difficult to

show that the six items we included were items that a significant proportion of Canadians in all occupational groups believed to be relevant for children. If this requirement is not met, then the data are difficult to interpret. For example, women may have scored low on our indicator not because they held low child-quality standards but because they did not see the items that we asked about as being particularly relevant. They may well have had other, equally expensive, items that they did feel were important for children. Moreover, we included this measure after reviewing literature (see our earlier discussion) which argued that the minimum expenditure per child that parents can reasonably consider rises with social class. This implies that child-quality standards should have been positively associated with our social class measure -- the tastes of the non-manuals should have been such that they assessed the direct costs of children as higher than the manuals did. As Table 4.11 indicates, however, this was not borne out.

Table 4.11 Social Class by Child-Quality Standards

	Occupational Category			
Child-Quality Standards	Prof.-Man.	Other Non-Manual	Skilled Manual	Unskilled Manual
High	56 %	53 %	54 %	54 %
Low	44	47	46	46
Total N	25	17	37	26

The respondents in the professional-managerial category were no more likely than the respondents in the unskilled manual category to assess the direct costs of children as high.

Faced with these difficulties[20] we had to revise our initial intentions of examining the influence of child-quality standards on fertility intentions in the sample as a whole. We decided to investigate the relationship between child-quality standards and the probability of having a third child only within occupational categories. We felt that this would, to some degree, control for selected taste-forming factors; that it was more likely that our six items were similarly being assessed as relevant (or not relevant) by women in similar occupational strata. We also reanalysed the data using the components of the index to see if any of the subitems showed different patterns of association. Table 4.12 presents the relationship between child-quality standards and future fertility intentions for non-manual and manual occupational groups. We collapsed our social class indicator into two categories to increase cell sizes and because the professional-managerials and other non-manuals showed a similar pattern of relationship as did the skilled and unskilled manuals.

Table 4.12 Child-Quality Standards by Future Fertility Intentions for Non-Manual and Manual Occupational Categories

	Non-Manual Category		Manual Category	
	Child-Quality Standards			
	High	Low	High	Low
Probably/Definitely No More Children	74 %	37 %	50 %	48 %
Undecided	13	16	32	21
Probably/Definitely More Children	13	47	18	31
Total N	23	19	34	29

As the table indicates, there was a relationship between child-quality standards and intentions regarding a third child but only amongst the non-manual workers. The majority of the non-manuals who felt it was important to give their children many material comforts were planning on having two children -- 74 percent said this was their intention versus 37 percent of those who assessed the direct costs of children as low. Conversely, approximately 50 percent of the manual workers were intending to stop with two children regardless of their child-quality standards.

In our attempt to explain these results, we examined the relationship for each of the sub-items[21]. Amongst the non-manuals, the relationship held for each of the commodities except "new clothes rather than hand-me-downs" where there was little association. Amongst the manual workers, however, two items (new clothes and separate bedrooms) showed the expected relationship, two items (a nice home and new toys) showed an <u>opposite</u> relationship, and two items (a backyard and a yearly holiday) showed no relationship.

Interpreting these results must remain highly speculative. If we assume that all the women in the non-manual occupational category assessed the items we included in our index as relevant for children, then it appears that those with high child-quality standards were less likely to be considering a third child than those with low child-quality standards. This could provide support

to the hypothesis that parents invest in the "quality" of children at the expense of "quantity" -- that is, as child-quality standards increase, child "quantities" decrease. This is highly speculative, however, as we can refer only to face validity to assert that our items are relevant to a non-manual occupational category. As to the data concerning the manual workers, there is little we can conclude. We have no way of independently checking how relevant our index's sub-items were and hence are not in a position to comment on the influence or lack of influence of child-quality standards. With regard to some items, the expected relationship between child-quality standards and probability of a third child was found, but no relationship and even opposite relationships were found for other items.

Turning to the indirect costs of childcare, we found that economists (see, for instance, Gregory and Campbell, 1976; Willis, 1973; Michael, 1973) have largely meant the indirect costs to the wife, that is, her potential earnings in the market place. The higher the wife's potential earnings, the higher the price of a child. By and large, the woman's education is used as a measure of the price of her time. (It is for instance in Willis (1973) and Michael (1973) noted above). The danger with this, however, is that level of education is many-faceted and seems to be "interpreted in empirical work as a good proxy variable for whatever is of interest to the researcher" (Robert Michael, 1973: S140). Moreover, these

measures of indirect costs overlook Easterlin's (1970) criticism that a woman contemplating a (another) child does not necessarily assess the costs of childcare in terms of earnings she must forego, but rather in terms of the price of pertinent child-minding services she has access to. He suggested that opportunity costs could approach zero if there was a relative available for child-minding or public provision of free day-care centers.

Taking these considerations into mind, we measured indirect costs by asking the woman how much she would stand to gain -- economically -- by returning to work. We prefaced this question by asking about the types of employment the woman could find and the kind of child-care she would use if she did return to work, so that these factors would be uppermost in her mind when she made her assessment. The women's responses were coded into four categories: it would be profitable for her to return to work; the woman would be ahead financially, but only slightly; the woman would be breaking even if she returned to work; and the woman would actually be losing money if she returned to work.

According to the economists, as the indirect costs of a child go up so too should the desire to limit the size of one's family -- well-paid mothers (i.e. those for whom the indirect costs of a child are high) stand to lose more, economically, by having children. Using our measure of indirect costs, this hypothesis gains no support. Table 4.13 shows the lack of relationship

between indirect costs and future fertility intentions.

Table 4.13 Indirect Costs by Future Fertility Intentions

Future Fertility Intentions	By working, women would: Lose Money	Break Even	Small Profit	Profit
Probably/Definitely No More Children	54 %	74 %	47 %	47 %
Undecided	15	17	27	27
Probably/Definitely More Children	31	9	27	27
Total N *	13	23	15	45

* The total N equals 96 because nine women felt unable to answer the question.

Women for whom it would be very profitable to return to work were no more likely to feel that they had finished childbearing than women who would only be breaking even by returning to work -- 47 percent of the women for whom indirect costs were high said they likely would not be having further children as compared to 54 percent of those women who would actually lose money by attempting to return to work. Conversely, 31 percent of the women who would lose money by working thought they would be having more children as compared to 27 percent of those who were "losing money" by not working.

In the introduction to this section on prices, we questioned whether there was such a concept as indirect costs as the economists used the term. Certainly conducting the interviews did nothing to dispel our doubts. Economists have found that a woman's education correlates

with her anticipated family size and we would not disagree such a relationship does exist. However, to conclude that this relationship indicates the influence of indirect costs seems far too simplistic to us. When we measured indirect costs more directly (i.e. through the woman's estimation of how much money she was losing by not working), no relationship with fertility intentions emerged. Moreover, in the interviews themselves, many women would have to be really prodded even to answer how much they would stand to gain by working -- it was clearly a question they had never thought about and, furthermore, did not want to think about. They had no intention of working (or conversely, were working for their "sanity") and found it hard to put a price on their time. If by probing we did come up with an answer, the woman was sure to qualify it: "Even if I did make money I'd never go back to work when the kids are at home. Why have kids?" or, conversely, "Sometimes I have to work just to get out. Even if it was just money for the babysitter, I'd have to get out. There's no price you can put on that". The level of a woman's education no doubt influences her decisions regarding family size but, we would argue, only in isolated cases because of the indirect costs of her time. In the next section we consider tastes for children and this we feel is much more useful in accounting for the relationship between education and fertility intentions than indirect costs.

In this section on the prices of children, we have

considered both direct and indirect costs. With respect to direct costs, we were unable to answer the question we had initially set for ourselves. It remains a matter for investigation whether or not wealthier couples feel under greater pressure to spend money on their children and, further, whether this influences the number of children they have. We did investigate the influence six material commodities had on our couples' intentions regarding a third child and found, for the non-manual members of our sample, that the more these commodities were valued, the less likely a third child was planned. This may well have revealed some "play-off" between "quality" and "quantity" of children; however, as we could not validate (other than by inspection and casual conversation) the relevance of the commodities to the couples, the results must be considered speculative. For the manual members of the sample, a variety of relationships was uncovered, but because of difficulties with our indicator, there was little we felt we could conclude. Indirect costs, at least as we measured them (through the woman's estimation of how much money she was losing by not working), showed no relationship with fertility intentions. From the interview data, we concluded that the economists' emphasis on the financial benefits women forego by not working (or gain by working) and the influence this has on fertility intentions may be misplaced. None of our women appeared to be considering the "substitution" effect in their considerations regarding a third child.

4.4 Taste Variables

The final factor in our theoretical framework to be considered is tastes. It is also the facet of the socioeconomic theory of fertility that has received the most criticism. Measurement of theoretical concepts is difficult at the best of times, but becomes even more difficult when "tastes" or "preferences" for children are being considered. As T. Paul Schultz (1969: 176-177), for instance, has noted, these are conceptual variables for which empirical counterparts are difficult to find. This said, however, we have in our favour a large body of previous research which has attempted to measure tastes and from which we could cull useful questions.

It became very obvious when we were reviewing the literature on motherhood, children and families, that the dimensions of attitudes concerned with such subjects were numerous. After considering this literature, we decided to organise our discussion of taste factors important in influencing fertility decisions around the following four factors: size and composition of the ideal family, the conjugal relationship, sex-role norms and behavior and antipathy towards children. This division into four factors is quite arbitrary and, although based on a careful review of previous research, it should be seen more as an aid to reduce confusion, than as a comment on the dimensions of tastes. Our feeling, in accord with Banks (1954: 1-2), was that "although it is always possible to think of a number of likely

explanations for any kind of phenomena, a real advance in knowledge begins only when a serious attempt is made to evaluate these claims". Moreover, "an empirical investigation which tried to carry along every conceivable influence upon the fall in fertility would become tediously involved and complicated. If we are to make any progress at all, some kind of selection of the main influences is necessary" (1954: 8). The taste factors we selected for consideration appeared to be central to the decision making behavior of our couples and there were certainly no factors which a large number of the couples mentioned, but which we ignored. However, as we said, the division is arbitrary (although based on the previous research) and is intended more as an aid to the presentation of the data than as a comment on the dimensions of tastes.

Size and Composition of the "Ideal Family"

The importance of the size and composition of a couple's "ideal family" to decisions concerning the birth of a third child is readily obvious. No doubt these "ideals" change over the course of a couple's reproductive lifetime in response to actual experience with child-bearing and rearing (see, for instance, Cartwright, 1976), but we would argue that at any given point stated family ideals will be a factor influencing couples to try or not to try for a child. We measured this factor through the following set of questions:

> Thinking about couples more or less like yourself, what do you think is the ideal number of children

for them to have nowadays?

> What do you think is the ideal number of children for a couple in this country nowadays, supposing they had no particular worries about money or anything like that?
>
> Some couples want a certain minimum number of boys and girls. For instance, they continue to have children until they have a son or a daughter. Would you continue to have children until you had at least one boy? And how about at least one girl?

The inclusion of questions on ideal family size is common in population surveys (see, for instance, Cartwright, 1976; Askham, 1975) and most have found that the family size couples consider ideal for people "more or less like themselves" is lower than what they consider to be ideal for those with "no particular worries about money or anything like that". Some surveys mention in passing that there are couples who will not answer the question -- in Cartwright's study, for instance, 8 percent of the women felt the best number of children was "up to the couple to decide" -- but this is never presented as an overwhelming problem. In our survey, the problem was overwhelming -- the majority of women answered the questions on ideal family size with "it depends on the person" or "I can't say for others -- it's whatever they can manage". We may have set ourselves up for this lack of response by stressing previously in the interview that we were interested in individual feelings and attitudes; that everyone had different views but theirs were what we wanted. When it became evident that the questions "were not working", we reworded them to:

What is the ideal family size for you and your husband?

Say you were substantially richer, how many children would you have; that is, what would be the ideal family size then?

The reworded question on ideal family size followed the discussion on why the couple were planning the number of children they were and many took ideal and anticipated family size to be synonomous. We tried to differentiate between the two concepts but, for many, the distinction did not seem to be fully grasped. As it was, 63.5 percent (54, 20 women were not asked the question) said that their ideal family size was what they were planning to have -- they felt fairly comfortable that they would be able to meet, and not exceed, their ideal family size. The majority of the remaining 36.5 percent (31) of the women who gave differing numbers for ideal and anticipated family size had given a multiple answer for what they anticipated and were more firm in what they saw as ideal -- for instance, nine women anticipated two or three children whereas their ideal was two; they saw the ideal family as a boy and a girl and, because they either had two boys or two girls, were debating whether to try for a third or not. Only six women gave what seemed to be contradictory answers -- their ideal was two children, but they anticipated more than two or three. No one in this group, however, felt that they would exceed their ideals due to contraceptive failure[22] -- it was more likely that they were going on to have children of the sex they wanted or to have children when they

could better afford them and thus enjoy them more. In fact, half of the six women who apparently gave contradictory answers could be said to have misunderstood what was intended by the question. The ideal family size was two for them -- at the moment. But they anticipated three, four or five children in the future, when and if they could afford them -- and, most likely, when their ideals were also three, four or five.

The responses to the question of ideal family size if the couple was substantially better-off were referred to in the income section of this chapter. Eighty-eight women were asked the question and 76 percent were quite sure they would not have additional children if they had more money. The majority of the remainder thought additional money would increase their family size, but three said if they were wealthier they would not have any children. Their feeling is captured by the woman who said "oh, if I were super-wealthy, I'd be too busy travelling and doing what I wanted to do to have any children". Those who did feel they would have more children if they had more money were usually thinking in terms of an additional two or three children. Nobody, even in this case where money was no barrier, claimed an ideal family size of over six children.

It is difficult to compare these results with those from other surveys, not only because of the changes in the question wording, but because the previous surveys cover different societies and different periods in time.

The results suggest, though, that among our women, two is the most common anticipated and ideal family size. The majority of the respondents felt they would be able to attain their ideal family size and those who anticipated having more than their ideal were thinking in terms of no more than one or two additional children. Only one woman said one child was ideal and to that extent the sample conformed to previous samples who uniformily dismiss the one-child family as undesirable. Income did not seem to affect significantly the stated ideal family size. Over seventy-five percent of the respondents thought the ideal family size was what they were planning to have and this remained firm regardless of what their economic position might be.

Turning to the sex composition of the ideal family, the previous research suggests contradictory conclusions. Westoff, Potter, Sagi and Mishler (1961: 294), in their study of American couples with two children, found that their data "provided unequivocal evidence of a relationship between sex of offspring and the number of additional children desired. On the average couples having children of the same sex desired the most children". Cartwright (1976), likewise, found that among British couples with two children, those where the two children were the same sex were more likely to be hoping for a larger family than those where the two children were the opposite sex. She concluded that "a desire for a mixed-sex family contributes to that decision (the decision

concerning future fertility)" (1976: 29). Askham (1975), on the other hand, did not find that the sex of offspring greatly influenced a couple's future fertility intentions -- among her Scottish couples, there was not a greater tendency for the first two children to be the same sex amongst those with four children. In fact, because the sex of the first two children did not help account for differential fertility, Askham did not explore the question further.

For our couples, concern about the sex of children did seem to enter, to some degree, into attitudes about a third child. Table 4.14 shows the future fertility intentions of our couples controlling for the family they presently have.

Table 4.14 Sex Composition of Present Family by Future Fertility Intentions

Future Fertility Intentions	Present Family		
	Two Boys	Two Girls	Boy and Girl
Probably/Definitely No More Children	42 %	52 %	58 %
Undecided	27	26	17
Probably/Definitely More Children	31	23	25
Total N	26	31	48

Those with a boy and a girl were most likely to be stopping with two children (58 percent compared to 42 percent of those with two boys and 52 percent of those with two girls), although the differences were not that large. Those with two boys or two girls were more likely

to be undecided about their future intentions; the percentage of those definitely planning to have more children was fairly uniform across the three sex composition classes.

We asked those respondents who had two children of the same sex and were planning additional children, what they would have done if they had had a boy and a girl. There were twenty-eight such couples, and 61 percent of them said they would have stopped at two if they had had a boy and a girl. An additional 11 percent said they might have stopped with a boy and a girl, which left only 29 percent who said they would have gone on regardless of the sex of their first two children. We also looked at the reverse of this -- we asked those couples with a boy and a girl what they would have done if they had had two boys or two girls. Amongst those who were planning to stop with their present two children, 43 percent said they would have gone on if they had had either two boys or two girls. Our data, thus, seemed to indicate that sex composition did influence couples in their desire for children. While it may not necessarily have made them claim, at this stage, definitely to want more children, it did appear to make them more undecided about how many children to have. It seems that the desire for a mixed-sex family was one taste factor couples considered when they planned how many children they would have.

The Conjugal Relationship

Our second taste factor was the conjugal relationship and by this we meant the nature of the relationship between the husband and wife and its influence on the decision regarding a third child. Rainwater (1965) organised his study of family design around the concept of "conjugal role relationship" which he defined as "their (i.e. the husband and wife's) typical ways of organizing the performance of tasks, their reciprocal expectations, their characteristic ways of communicating and the kind of solidarity that exists between them" (1965: 29). Rainwater found that no combination of indicators did a better job of discriminating medium-size from large-size family preferences "than the single factor of jointly organized versus medium-segregated conjugal role-relationships" (page 199). By jointly organised and medium segregated conjugal role relationships, he meant, following Elizabeth Bott (1957), how interwoven the interests and concerns of the husband and wife were. In a jointly organised conjugal role relationship, the husband and wife undertook many activities (recreation as well as task performance) "together with a minimum of task differentiation and separation of interest. They not only plan the affairs of the family together but also exchange many household tasks and spend much of their leisure time together" (Bott, 1957: 53). There was also an intermediate conjugal role relationship and here the husband and wife "value sharing and inter-

changeability of task performance but they do not carry this as far as do the couples with joint relationships" (Rainwater, 1965: 31). These relationships are, as the name suggests, "not sharply polarized in either the jointly organized or highly segregated direction" (page 31).

As we mentioned, Rainwater found that "the more interwoven the interests and concerns of the husband and wife the more likely the wife is to want a small or medium-sized family; the more separate are their interests and concerns, the less they see their marital roles as interpenetrating and the more likely the wife is to want a large family" (page 193). He accounted for this by an alternative-rewards argument -- a woman who lives a separate life from her husband was "less likely to find relating to him and sharing activities with him a source of validation as a woman, and the more likely to seek this in mothering" (page 192). Women in joint relationships, on the other hand, "are more involved with their husbands in common interests and activities, and more identified with the husband and his accomplishments" (page 192)[23].

The whole issue of conjugal role-relationships has been subject to a number of enquiries and the conclusion from these is that the topic is more complicated than either Bott or Rainwater implied (see, for instance, Platt, 1969; Turk and Bell, 1972; Broderick, 1972; Cromwell and Wieting, 1975). It was Bott's impression (1957: 52) that sharing or non-sharing in the various areas of family life tended to coincide and Rainwater's

impressionistic classification system reflected this. More recent studies (there are many such studies. Almost any issue of the Journal of Marriage and the Family will have some paper dealing with the issue. See in particular Volume 34, 1972) have shown, though, that this is not so -- answers to a series of questions on conjugal roles are usually not related in such a way as to suggest the presence of an underlying dimension of jointness/segregation. There is also the problem of "whom you ask what" -- husbands and wives seem to have differing impressions of "their typical ways of organizing the performance of tasks, their reciprocal expectations, their characteristic ways of communicating and the kind of solidarity that exists between them" (Rainwater, 1965: 29; see, also, Safilios-Rothschild, 1969). It seems to be an area where "objective reality" has to be clearly differentiated from "subjective reality" and the consequences fully acknowledged. Moreover, there is the problem of distinguishing between dogma and praxis. Women and their husbands may well hold a theoretical "proper" code of conduct while engaging in substantially different patterns of behavior. Impressionistic measures which simply ask "tell me something about your family" (Rainwater, 1965: 333) may well be getting some mixture of the theoretical and the actual code of conduct.

Whilst the area of conjugal role-relationship is beset with measurement problems, this seemed insufficient reason to dismiss the variable entirely, particularly

when its influence on decisions concerning family size has been so intriguing. After a careful review of the literature, we decided to continue with the topic of conjugal relationship but divide it into four components: task performance, decision-making, leisure activities and communication and understanding.

Sixteen questions were used to measure task performance and all asked the respondent to identify who did certain tasks. The response categories were wife always, wife usually, one or the other, together, husband usually or husband always. Because previous studies employing this measurement technique have found that this is not a unidimensional variable (for instance, F. Campbell, 1970), we worked with three different task performance categories:

a. Household Tasks -- grocery shopping, repairing minor things around the house, washing the evening dishes, taking out the garbage, tidying up the house, getting things from the basement or attic, preparing the evening meal and the family's laundry;

b. Childcare Tasks -- getting breakfast for the children, putting the children to bed, discipling the children, and getting up with the children at night; and

c. Financial Tasks -- keeping track of the money and bills, paying the rent, handling financial affairs at the bank and dealing with the mortgage company (or landlord).

Fourteen questions were used to measure decision making. In previous research (for instance, Oppong, 1970; Mitchell, 1972; Larsen, 1974), decision making has been used as a measure of the distribution of power between the husband and wife. For our study, no such claim is being made. It is our feeling that the execution

of power occurs well before an overt decision is taken. A measure of power would have to investigate the "moves and countermoves, threats and promises, aggression and appeasement" (Sprey, 1971: 237) which serve to guide either the husband or wife to make a given decision. Thus our measure was concerned with how women perceived decisions to be made and no comment was intended on how family policy was formulated. The response categories for the decision making questions were wife always, wife usually, one or the other, together, husband usually, and husband always and, again to circumvent problems of unidimensionality, the set of questions was divided into three:

a. Economic Decisions -- Which house or apartment to take? What job the husband should have? Whether or not to buy life insurance? How much money the family can afford to spend per week on food? Whether the wife should work? and How much money should be spent on major purchases?

b. Childcare Decisions -- How much money should be spent on the children? What the child should be allowed to do? At what time the children should be sent to bed? and How the children will be disciplined?

c. Social Decisions -- Where to go on vacation? Which friends are seen the most often? How often they should go out for an evening? What television (or radio) programmes to watch?

The nature of the couple's leisure activities was measured by having the woman discuss, first, the nature of her husband's leisure (whether she knew his friends, what he did with his leisure time, and how often he went out either on his own or with his friends) and then how she spent her leisure time (what she did with her spare time, whether her husband knew her friends and

how often she went out on her own). This was followed up by asking if the couple went out together and, if so, how often. This discussion followed two lines -- initially visiting with friends and then visiting with relatives.

The degree of communication and understanding between the couple was measured through four questions (derived from Scanzoni, 1975): How do you feel about the ways you and your husband can confide in each other, talk things over and discuss anything that comes up? (communication); How do you feel about the way your husband understands your problems and feelings (understanding); How do you feel about the physical love and sex relations you experience with your husband? (physical relations); and How do you feel about the companionship that you and your husband have in doing things together? (companionship). The response categories for the four questions were very good, okay and not so good.

The questions measuring task performance and decision making were scored into three categories: the wife usually makes most of the decisions or does most of the tasks, the husband usually makes most of the decisions or does most of the tasks, and the activities are either shared or the husband is as likely to do them as the wife. If Rainwater and Bott's hypothesis is supported, then those couples sharing tasks and decision making should be most likely to want no more children. The rationale, to repeat, is that common interests and activities are incompatible with a large family. Alterna-

tively, those couples not sharing tasks and decisions should be most apt to be considering further children because a large family in this case is not inconsistent with their life-style and, in fact, may provide "the source of validation as a woman" (Rainwater, 1965: 192) that is missing because of the lack of a jointly-organised marital relationship. Table 4.15 shows the percent of women who do not want any more children broken down by who does the various chores (task performance and decision making). If there were less than five cases in a particular category, the percentages are not included.

Table 4.15 Percent of Women Who Feel They Probably or Definitely Will Not Have a Third Child by Who Performs Certain Tasks and Who Makes Various Decisions (Wife's Evaluation)

	Wife Usually	Together	Husband Usually
Household Tasks	52 % (77)	52 % (25)	2/3
Childcare Tasks	57 % (53)	48 % (48)	2/4
Financial Tasks	50 % (30)	58 % (33)	50 % (42)
Economic Decisions	60 % (5)	50 % (86)	64 % (14)
Childcare Decisions	50 % (26)	53 % (75)	2/4
Social Decisions	1/3	54 % (85)	48 % (17)

Total Ns in brackets

Little, if any, support for the Bott-Rainwater hypothesis is apparent from Table 4.15. An equal percentage of couples did not want further children regardless of who did the household, the childcare or the financial tasks. Likewise, who made the economic, childcare or social decisions had little influence on the desire for more children. Moreover, this lack of relationship

persisted when husband's occupation was introduced into the analysis -- none of the occupational groupings showed any greater degree of association than the original table.

Lack of support for the Bott-Rainwater hypothesis is not limited to our data. Stokes (1973), for instance, found that socio-economic status was a better predictor of fertility both before and after the effects of family structure were controlled. While family structure did influence reproductive behavior, it was not particularly dominant. Cartwright (1976), likewise, found that women whose husbands helped with the household and looking after the children neither had nor wanted different sized families than those whose husbands did not play this role. Any differences were in achieved family sizes of over three and seemed to stem from the differential use of contraception. Husbands and wives who shared the household and care of children also tended to discuss their problems and decisions, be more effective contraceptive users and consequently have smaller families.

A large part of Rainwater's classification system seemed to stem from the nature of the couples' leisure activities and when we looked at this variable for our data, we found more interpretable results. Coding the women's discussions of their leisure activities was rather difficult -- for instance, "quite a bit" was the most common answer to "how often do you go out" and on probing we found that "quite a bit" meant more than

three or four times a week to some women and once or twice a month to others. Some women counted "coffee-ing" with their neighbours during the day, grocery shopping or going to the launderette as "going out" whereas others were adamant they never got out -- even though they did the same activities, they viewed them in an entirely different light. Others felt their husbands never or seldom went out on their own, whereas some women saw the simple fact of their husbands going to work as their being able to "get out". After reading through all the interviews, we felt a four-fold classification system captured most of the responses:

a. the husband and wife went out together, but neither socialised by themselves. The majority of our couples (fifty-three) fell into this category;

b. the husband and wife went out together, but each had their individual interests which took them out on their own at least once a month. There were twenty-six such couples;

c. the husband and wife went out together, and the husband, but not the wife, had outside interests. Fifteen couples fell into this category; and

d. the husband and wife went out together and the wife, but not the husband, had outside interests. This category included six couples.

"Coffee-ing", grocery shopping and the like were not classified as an outside interest unless the activity was set up as a social activity -- that is, it was something done with friends and without children and was seen as a pleasurable excursion.

The extent to which a couple's leisure activities influenced their intentions regarding a third child is indicated in Table 4.16.

Table 4.16 The Nature of a Couple's Leisure Activities by Future Fertility Intentions

Future Fertility Intentions	Leisure Activities			
	Visit as Couple Only	Each Have Separate Interests	Husband Has Separate Interests	Wife Has Separate Interests
Probably/Definitely No More Children	55 %	38 %	73 %	33 %
Undecided	21	23	13	50
Probably/Definitely More Children	24	38	13	17
Total N *	53	26	15	6

* The total N equals 100 because we were unable to assess the nature of a couple's leisure activities in five cases.

Those women whose husbands had outside interests, but they themselves did not, were most apt to not want a third child -- 73 percent said they definitely or probably would not be having further family. Those couples where both the husband and wife had independent outside interests as well as socialising with each other, were most apt to be planning more children. Of this group, 38 percent said they likely would be having at least one more child. Those couples where the wife, but not the husband, had outside interests were least likely to be planning on a family of just two -- only 33 percent felt they would definitely or probably be stopping with their present two children.

These findings can be explained in some measure by Rainwater and Bott's theory -- their hypothesis would suggest that those couples where both the husband and wife have their own interests would be those couples where the wife is more likely to want a large family. This is certainly borne out. The theory cannot explain though why it is that those couples where the husband has outside interests and the wife does not are those couples most apt to want no more children. It would seem logical from their hypothesis that these couples in particular should want a large family -- it is especially true that these women live separate lives from their husbands and are thus "less likely to find relating to him and sharing activities with him a source of validation as a woman, and the more likely to seek this in mothering" (Rainwater, 1965: 192).

Reading through the interviews and observing the women in interaction with their children suggests an alternative hypothesis which would account for all the findings. This hypothesis has to do with the woman's "ability to cope". Women who felt "tied down", "cooped up" or just generally unable to cope with the two children they had were least likely to want more children -- two were "more than enough". Women, on the other hand, who seemed to be managing two children without trouble and who had the time, energy and motivation to have interests outside their home, were much more likely to contemplate additional children, at least under some circumstances. This explains why in our classification system, those

women whose husbands had outside interests but they themselves did not felt most apt to stop with two children. These women in particular felt "trapped" -- their husbands were going out on their own regularly whereas they were "stuck at home". They definitely did not want more children. Alternatively, women who had outside interests were least likely to feel "tied down" and least likely to feel they would definitely or probably not have more children. They had an organised social life apart from their homes and husbands and they seemed much more able to accomodate additional children. Women who did not have outside interests, but whose husbands likewise were very home-centered, were intermediate. They were less likely than the women whose husbands only were able to get out on their own to be considering just the two children, but more likely than the women who were themselves able to fit in socialising.

We were unable to find a similar hypothesis to this in the literature -- many studies of fertility do not consider the influence of a couple's leisure activities (for instance, Askham, 1975; Woolf, 1971) and those that do tend to consider other aspects of the relationship -- but we would suggest that it has more explanatory power than Rainwater and Bott's alternative-rewards hypothesis. At least for our sample, the woman's ability (or lack thereof) to manage both a home and outside interests tells us much more about her fertility intentions than how interwoven are her and her husband's leisure activities.

When we introduced our social class indicator into this analysis, small cell sizes hindered us from making more than the most tentative of conclusions. As Table 4.17 indicates, the relationship did appear to hold when we introduced husband's occupation.

Table 4.17 Percent of Women in Each Occupational Category Who Feel They Probably or Definitely Will Not Have a Third Child by the Nature of the Couple's Leisure Activities

	Leisure Activities			
Occupational Categories	Visit as Couple Only	Each Have Separate Interests	Husband Has Separate Interests	Wife Has Separate Interests
Prof.-Managerial	78 % (9)	57 % (7)	3/5	0/1
Other Non-Manual	64 % (11)	0/1	1/1	1/2
Skilled Manual	47 % (19)	30 % (10)	3/3	0/1
Unskilled Manual	67 % (9)	3/5	4/4	1/2
All	55 %	38 %	73 %	33 %

Percentages are not included when a category has fewer than five cases.

Total Ns in brackets

In each of the occupational categories except the professional-managerials 100 percent of the couples where the husband, but not the wife, had outside interests felt they definitely or probably would not be having further children. Moreover, in all of the occupational categories, the couples where both the husband and wife had outside interests were those couples least likely to feel their families were finished. Amongst the professional-managerial occupational category the expected pattern was broken in that it was the couples where

neither the husband nor the wife pursued individual outside activities who were the most likely to feel they would only have two children.

Considering the small cell sizes, the initial relationship appears to be remarkably stable with the introduction of our measure of social class. The professional-managerials were the only group which did not completely conform to the pattern and this could, indirectly, provide support for the original interpretation we offered of the data. We had suggested that it was the woman's "ability to cope" which accounted for our results -- women who felt "tied down" or unable to cope were least likely to want three children and this feeling was reflected in the patterns their socialising took. From family literature (see, in particular, Hannah Gavron, 1966) we would expect children to disrupt the lives of both middle and working class women, but for middle class women to be better able to maintain control and some independence. We are working with very small cell sizes and hence our conclusions are extremely speculative, but it may be that the original relationship between patterns of socialising and future fertility intentions was least likely to hold for the professional-managerial wives because these wives were least susceptible to problems of coping or best able to overcome them.

The final measure of husband-wife communication that we considered was the wife's evaluation of the relationship between herself and her husband. The four

questions from Scanzoni (1975, outlined above) were used with the response categories very good, okay and not so good. These response categories proved rather unsatisfactory -- women did not want to choose "okay" to describe the relationship between themselves and their husbands and yet "very good" was slightly too positive. It would have been useful to have had a fourth category "good" as many women volunteered that they were "somewhere between very good and okay".

As it was, the three-fold classification showed a relationship with future fertility intentions, particularly on the understanding and physical relations dimensions. Table 4.18 presents the percent of couples who definitely or probably do not want a third child by the nature of their conjugal relationship.

Table 4.18 Percent of Couples Who Definitely or Probably Do Not Want a Third Child by the Nature of the Relationship Between Them (Wife's Evaluation)

Components of Conjugal Relationship	Wife's Evaluation of Conjugal Relationship		
	Very Good	Okay	Not So Good
Communication	51 % (65)	54 % (33)	2/3
Understanding	46 % (48)	56 % (46)	71 % (7)
Physical Relations	46 % (77)	78 % (23)	--
Companionship	51 % (73)	56 % (27)	1/1

Percentages are not included when the category contained fewer than five cases.

Total Ns in brackets

A clear pattern was evident on the understanding and physical relations dimensions -- a decline in the quality of the communication between the husband and wife

was associated with an increase in the desire for two and only two children. This trend was also evident on the communication and companionship dimensions, although the interpretation was hindered by small cell sizes.

Without making a value judgement on the relative satisfaction to be derived from segregated and joint conjugal relationships, Rainwater and Bott's theory is of little use here. The most "rational" explanation for the association is that couples with poor relationships are least likely to want to bring additional children into the family in case the family should disintegrate. If things are not going well with two children, then it would be foolish to have any more. Some women did suggest this reasoning when they were discussing under what conditions they would or would not have more children (for instance, "I suppose if there started to be problems in the marriage I would think twice about having more kids because they would probably just add more to the strain that was already developing"); however, no one mentioned this as the reason why they wanted no more family. Economic problems and coping difficulties would be suggested, but never marital difficulties. The women may have been simply reluctant to admit this was why they only wanted a family of two and, although we never had the feeling that they were "covering-up", this remains the most plausible explanation. It could also simply be that a poor marital relationship manifested itself in economic problems and coping difficulties.

Introducing our measure of social class into this set of relationships again proved difficult because of small cell sizes. Most women assessed the relationship between themselves and their husbands as being very good[24] and thus analysis was tentative with no control variables. When we did look at the relationship between husband and wife and future fertility intentions within the occupational categories, it appeared to hold. Certainly with regard to physical relations and understanding, a decline in the nature of the relationship between the husband and the wife was associated with an increase in the desire for two and only two children in each social grouping.

In this taste subsection we have examined the influence of four components of the conjugal relationship on a couple's decision regarding a third child. The four components were task performance, decision making, leisure activities and communication and understanding. Rainwater's previous research had led us to expect that the more interwoven a couple's activities, the more likely they were not to be planning a third child. With regard to task performance and decision making, Rainwater's hypothesis was not supported. Amongst our sample and with our indicators, who did or decided what was unrelated to future fertility intentions. Rainwater's hypothesis gained some support from the leisure dimension; however, there were results which could not be accounted for. From the ongoing qualitative analysis, we hypothesized

an alternative explanation. It appeared that future family size intentions were connected with how well a woman was "coping". If she was having difficulties coping with two children, then she was less likely to be planning a third child. Conversely, if she was managing two children without difficulty, then she was more likely to be planning a third child. This coping dimension seemed to tie in with the leisure variable. Women were most apt to feel that they were not coping if they had no outside interests and this was magnified amongst those women whose husbands did socialise on their own. Hence the relationship that we found in the data. The final measure of husband-wife communication that we considered was the wife's evaluation of the relationship between herself and her husband. It appeared that a decline in the nature of the communication between the husband and wife (particularly on two dimensions -- understanding and physical relations) was associated with an increase in the desire for two children. Rainwater's hypothesis was of little use here because we could not make a value judgement on the relative satisfaction to be derived from segregated and joint conjugal relationships. The most promising explanation was that women with poor relationships with their husbands were most hesitant about having a third child either because this child would add further strain to the relationship or because, in the event of a marital breakdown, there would be an additional child involved.

Sex Role Norms and Behavior

The third taste factor we considered was sex role norms and behavior. With the expansion of female educational and occupational opportunities, and the increasing availability of reliable contraceptives, women have been provided with choices they previously did not have. Family formation is now more likely than ever to be the outcome of individual and specific desires. In this regard, the women's sex role attitudes and behavior are of importance. We shall consider two aspects of this taste factor which have been shown to be of importance to family formation: the woman's past, present and future work behavior and her attitudes towards traditional and modern role behaviors. We will begin the analysis with our fourth background (control) variable -- the woman's educational level.

As we pointed out in the section on indirect costs, female education is many things to many people. As Ryder suggests, "the data are blind to the concepts of the theorist, and wife's education means whatever it means, . . ." (Ryder, 1973b: S68). In its relationship with fertility, previous surveys have generally found a negative association. In Britain, Cartwright (1976) found that mothers who had no further education after leaving school wanted more children than the other mothers. Askham (1975) found that the majority of her working class

Scottish wives had no further education, although those in social class III (skilled manual) with two children were more likely than the others to have had some. In Canada, Beaujot's Edmonton-based data showed an inverse relation between wife's education and fertility and this was in agreement with previous Canadian studies (the Toronto study; Charles, 1948; Henripin, 1968). For instance, among women who were aged forty-five to fifty-four in 1941, there was a difference of two children between those who had zero to eight years of schooling and those who had thirteen or more years (Charles, 1948: 68). In 1961, education of wife was second only to residence in its importance to fertility (Henripin, 1968: 345) and in the 1973 study (Beaujot, 1975), the range of differences due to education were the largest encountered for any of the background factors. American surveys have, by and large, found negative relations between education and fertility as well (Adelman, 1963; Friedlander and Silver, 1967; Heer, 1966; Janowitz, 1971) although more recent reviews have been suggesting mixed results (Bumpass, 1969; Janowitz, 1976).

The generally negative relationship between education and fertility is open to many interpretations. The effect may be direct -- a higher educational level may mean women are more efficient about acquiring knowledge of, and using, reliable forms of birth control, thus lessening the divergence between desired and actual family size.

Rindfuss and Westoff (1974) for instance found that women with higher levels of education were more likely to use contraception before their first pregnancy, while Michael (1973) reported that the more educated couples selected the more effective birth control techniques. Alternatively, education may have a direct effect on decreasing fertility by widening a woman's horizons beyond marriage and a family and influencing her preference for children (Janowitz, 1976: 189). Education may also be playing an indirect role in decreasing family size. Women with more education usually have better employment opportunities (in terms of job satisfaction, monetary rewards and working conditions) and hence there may be incentives to spend more time working and less time bearing and rearing children[25]. Finally, education affects age at marriage which in turn has been shown to influence family size. Women marrying later have a wider variety of work and educational experience than women who marry young and hence a greater acquaintance with non-familial roles.

It is difficult to separate the effects of education on fertility into its components, even supposing we have outlined all of the components. However, when looking at this variable in our sample, we shall keep in mind the four avenues through which we suggested it may be working and attempt some decomposition of its influences in any relationship we should find.

The increase in female labour force participation in recent years has been rapid and has occurred among women in all stages of the family formation process (Groat, Workman and Neal, 1976). Its effect on fertility, though, still remains unclear. Opinions vary on everything from "the existence of a relation between employment and fertility" to "the direction of the assumed relation and the explanation of the relationship" (Stycos and Weller, 1967: 210).

In developed countries such as Canada, United States and the United Kingdom, a negative relationship between working women and fertility has been fairly well established (Reed and Udry, 1973). The causal directions of this relationship, though, remain unclear. The primary question is whether women purposely limit their family size so they may work or work because their family size is limited (i.e. through problems of sub-fecundity). Moreover, some women may have to work for economic reasons regardless of their family size desires. It is widely assumed by sociologists that employment outside the home and motherhood are incompatible roles so that women who wish to work will curtail their fertility to avoid role conflict. One school of thought argues, however, that this incompatibility will not be felt by any but the elite (see, for instance, Peipmeier and Adkins, 1973). For women who must work because their contribution to the family income is essential, it is possible that role

conflict will be minimal and that the two variables (employment and motherhood) will be unrelated. For women who neither need nor are expected to work outside the home, role conflict may arise and, for them, this explanation remains open for investigation. Other explanations of the relationship between fertility and wife's occupational activity suggest increased awareness and use of contraceptives among the employed (Kupinsky, 1971) and greater contact with rational values and attitudes (Freedman et al., 1959; Ridley, 1959; Freedman, 1962; Glick, 1967).

In addition to problems of explanation, Safilios-Rothschild (1970) has pointed out that the majority of studies that have considered the relationship between fertility and female labour-force participation have used few analytical subcategories or distinctions -- all working women are grouped in one category and all non-working women in another. This global division groups greatly heterogenous types of married working and non-working women and may be a factor confusing the initial relationship. In our data, for instance, there were women who had worked between the births of their two children because their husbands were on strike and the income was necessary, because they felt their first born was becoming too reliant upon them and this was one way of having the child learn some independence, and because their old bosses had begged them to "help out"

over a company reorganisation. There were women working nights (and whose husbands therefore babysat), women working forty hours a week and commuting twenty miles daily, and women whose work was delivered to their doors and picked up at their convenience. To group all these women in one category and expect it to show some consistent relationship with fertility overlooks the many and varied reasons why a woman works and the conditions of her possible employment (i.e. hours, location and the nature of the duties performed).

When looking at the relationship between female employment and fertility desires in our data, we will try to use more refined subcategories than working/non-working. We shall also consider the problem of causality (does employment lead to fertility limitations or does sub-fecundity lead to employment) and attempt some measure of the assumption of role conflict generated by competitive sets of familial versus extra-familial obligations.

The final aspect of sex role norms and behavior that we shall consider is the woman's attitudes towards "traditional" and "modern" role behaviors. A common explanation for the fall in the birth rate stems from the issue of changing sex roles. This was, in fact, one avenue through which we suggested both education and employment might be working amongst our sample. Either through education or employment, a woman's horizons are widened beyond marriage and a family and consequently her pre-

ference for children is reduced. In the studies that have considered the impact of value orientations on fertility behavior (William Clifford, 1971; Arnott, 1972; Katelman and Barnett, 1968), the evidence appears clear that women who rate the more modern sex roles positively are more likely to want smaller families. Beaujot (1975), in the Edmonton study, developed a scale measuring attitudes toward the childbearing role; women scored low on the scale if they preferred working than being at home, disagreed that the husband should be the main achiever, disagreed that the woman was happiest with her children and envied couples with no children. Women scoring high had the opposite views and Beaujot found a positive relationship between this variable and future fertility intentions.

Information concerning the wife's education was asked in the last set of questions (all of which dealt with background factors) and was coded into five categories: less than grade twelve[26], grade twelve, post-secondary training of less than a year's duration (i.e. hairdressing, six-month secretarial course), post-secondary training of over a year's duration (nursing through a hospital, training at the Institute of Technology) and university. Five women had no post-secondary training as such, but had taken a number of classes since leaving school. We classified these women in the third category -- post-secondary training of less than a year's duration.

The woman's employment history and future employment intentions were gauged by having the woman discuss the positions she had held before the birth of her first child, between the births of her two children (and if there had been any miscarriages, through that period) and at the present. The type of work, the hours it involved, the childcare facilities she used and reasons why she had decided to work or not work were covered. Future employment intentions were gauged by asking the women what they saw for themselves in the future. To help the women with their discussion we divided "the future" into three time periods: What do you think you will be doing in six years, in twelve years and in twenty years? If the woman did not specifically mention employment, we asked if she would ever consider returning to work and under what conditions this might be feasible.

Sex role norms of wife, husband and mother were measured through a series of scales developed and tested by Scanzoni (1975: 130-144). With regard to the wife role, a set of twelve pertinent items were factor analysed separately for men and for women and eventually two dimensions emerged for both sexes: traditional wife role (TW) and wife self-actualization (SA) role. The TW role was defined as "representing an emphasis in which the interests of husband and children are placed ahead of those of the wife" (Scanzoni, 1975: 131) and was measured through eight items:

1. A married woman's most important task in life should be taking care of her husband and children.

2. She should realize that a woman's greatest reward and satisfaction come through her children.

3. If she works, she should not try to get ahead in the same way a man does.

4. A wife should not have equal authority with her husband in making decisions.

5. If she has the same job as a man who has to support his family, she should not expect the same pay.

6. A wife should realize that, just as a woman is not suited for heavy physical work, there are also other kinds of jobs she is not suited for, because of her mental and emotional nature.

7. A wife should give up her job whenever it inconveniences her husband and children.

8. If a mother of young children works, it should be only while the family needs the money.

The second dimension (SA) was defined as "an emphasis in which the wife's interests are equal to those of husband and children" (Scanzoni, 1975: 131) and consisted of four items:

1. Having a job herself should be just as important as encouraging her husband in his job.

2. She should be able to make long-range plans for her occupation, in the same way that her husband does for his.

3. If being a wife and mother isn't satisfying enough, she should take a job.

4. There should be more day care centers and nursery schools so that more young mothers could work.

Role modernity on these and the following dimensions was indicated by stronger preferences for the wife's individualistic interests and role traditionalism was indicated by a greater concern for the interests of the husband and children.

The second group of items were pertinent to the husband role and upon factor analysis three dimensions emerged separately for both sexes: problematic husband alterations (PHA), institutionalised husband-wife equality (IE) and traditional husband role (TH). The PHA scale was comprised of five items and the emphasis was on "the tentative, temporary, and problematic alterations that a husband might make in connection with a wife's occupational efforts" (Scanzoni, 1975: 132):

1. If her job sometimes requires her to be away from home overnight, this should not bother him.
2. If a child gets sick and his wife works, he should be just as willing as she to stay home from work and take care of the child.
3. If his wife makes more money than he does, this should not bother him.
4. On the job, men should be willing to work for women supervisors.
5. A married man should be willing to have a smaller family, so that his wife can work if she wants to.

The second dimension -- IE -- consisted of two items and the emphasis here was on "permanent, institutionalized behavior performed by the husband in response to his wife's occupational endeavors . . . behaviors which are not at all in keeping with traditional male expectations" (Scanzoni, 1975: 132):

1. If his wife works, he should share equally in household chores such as cooking, cleaning and washing.
2. If his wife works, he should share equally in the responsibilities of childcare.

The TH role was defined as "a form of the "patriarchal ideology" in which the greater significance of the

husband's interests and authority are legitimated via positions ascribed to him on account of gender" (Scanzoni, 1975: 132) and also consisted of two items:

1. A married man's chief responsibility should be his job.
2. The husband should be the head of the family.

The third group of items described the maternal role and two dimensions appeared separately for both sexes upon factor analysis: religious legitimation of the mother role (RLM) and traditional mother role (TMR). RLM was defined as "the degree of sacredness attached to marital and familial patterns" (Scanzoni, 1975: 133) and was measured through two questions:

1. Do you believe that the institution of marriage and family was established by God?
2. Do you feel that being a mother is a special calling from God?

The TM role was defined as a role in which "the interests of children are of greater significance than and are placed ahead of those of the mother" (Scanzoni, 1975: 133) and Scanzoni measured it through five questions. The factor loadings on three of these five questions were so low though (on average, of a magnitude below .20) that we proceeded with just two of the questions:

1. Do you think that a working mother can establish just as warm and secure a relationship with her children as a mother who does <u>not</u> work?
2. Do you feel a pre-school child is likely to suffer if the mother works?

All statements were answered with Likert-type response categories (strongly agree to strongly disagree

for wives' and husbands' roles and definitely yes to definitely no for mothers' roles) and a woman's responses were combined in sumscale fashion. Her total score was further assigned a "modern" or "traditional" code.

Wife's education was the first variable we considered in relation to future fertility intentions and the results are shown in Table 4.19.

Table 4.19 Wife's Education by Future Fertility Intentions

	Wife's Education				
	Less Than Grade 12	Grade 12	Short Course	Trade Course	University
Probably/Definitely No More Children	40 %	53 %	69 %	29 %	64 %
Undecided	20	26	15	21	27
Probably/Definitely More Children	40	21	15	50	9
Total N	20	34	26	14	11

The table indicates that the relationship between wife's education and fertility is in line with the previous Canadian data -- there was a slight inverse association such that the woman's educational level increased as her proposed family size decreased. The one exception to this relationship was those women with a trade training. They, more than any other educational group, were planning to have an additional child -- 21 percent were undecided about, and 50 percent were definitely planning, a third child. Other than this exception,

though, the educational groups followed the expected pattern. Women with less than a grade twelve education were most likely to feel they would be having a third child (40 percent) and women who had attended university were least likely to feel this way (9 percent).

We had suggested in the review of the literature that education's influence may work through a number of different avenues. It might be that better educated women want fewer children because they are more efficient contraceptive users, or because their horizons go beyond marriage and a family or because they have better employment opportunities which discourage them from having children. The relationship might also be a function of the wife's age at marriage. We will consider the first avenue when we examine the couples' use of contraception and the second and third avenues when we look at the woman's work behavior and role orientation, but we will examine the influence of the wife's age at marriage here. The two variables -- wife's age at marriage and education level -- are related[27] and so we looked at the relationship between wife's education and future fertility intentions controlling for age at marriage. Table 4.20 presents the results.

Table 4.20 Percent of Women Who Feel They Probably or Definitely Will Not Have a Third Child by Wife's Education and Age at Marriage

Wife's Age at Marriage	Wife's Education				
	Less Than Grade 12	Grade 12	Short Course	Trade Course	University
Under 20	33 % (15)	50 % (16)	43 % (7)	1/1	1/2
20, 21	1/2	50 % (10)	69 % (13)	0/4	1/1
Over 21	2/3	57 % (7)	100 % (6)	33 % (9)	63 % (8)

Percentages are not included when the category contained fewer than five cases.

Total Ns in brackets

Although the interpretation is hindered by the small cell sizes, it appears that both variables have some influence on future fertility intentions and that this is particularly so amongst those who married when they were young and those without a trade or university training. In each of the educational classes except trade training and university, educationally similar women who married when they were under twenty were less apt to feel they would not be having additional children than those who married at over twenty-one. Also, in each age category except marriage when over the age of twenty-one, those with less than a grade twelve education were less likely to feel their families were finished than those with university or trade training. For example, of the women with less than a grade twelve education who married when they were under twenty, only 33 percent felt they would have no more children. Among their educational peers who married when they were over twenty-one

years of age, 67 percent felt this way. Among the other women who married when they were under twenty, 50 percent of those who attended university, and 100 percent of those with a trade training felt they would probably be limiting their families to two. Thus both variables -- age at marriage and educational level -- appear to have an influence on the woman's future fertility intentions. Women who marry when they are older normally have more education which may influence them to have smaller families, but amongst women with similar levels of education, age at marriage continues to have an influence.

When we looked at the woman's employment history and her fertility intentions, the pattern we had anticipated did not emerge. We had expected that the longer the woman had worked, the less likely she was to be planning a third child. This, however, was not borne out by the data. We classified the woman's employment history into four time periods: employment before the first child, employment between the two children, employment within a year of the birth of the second child, and future employment intentions. From these four time spans, we created a seven category work index:

1. the woman has never worked and never intends to,
2. the woman has never worked, but intends to do so as her children are growing up,
3. the woman worked until her first child was born, but does not anticipate returning to work (or will return when her children are grown-up),
4. the woman worked until her first child was born and plans to return when her children are in school or playschool,

5. the woman worked until the birth of her second child, but does not intend to return,

6. the woman worked up until the birth of her second child and plans to return when her children are in school or playschool,

7. the woman worked throughout her married life and the births of both children.

As Table 4.21 indicates, this work index showed no relationship with intentions regarding a third child.

Table 4.21 Wife's Work History by Future Fertility Intentions

	Work Index *						
Future Fertility Intentions	Never Worked	2	3	4	5	6	Always Worked
Probably/Definitely No More Children	0/3	50 %	43 %	56 %	1/3	76 %	38 %
Undecided	0/3	38	29	21	0/3	12	33
Probably/Definitely More Children	3/3	12	29	23	2/3	12	29
Total N *	3	8	7	43	3	17	21

* The total N equals 102 because we were unable to determine the work history of three women.

Work Index headings are given in the text on this and the previous page.

Although those women who had never worked and never intended to all wanted a third child, those women who had always worked and always planned to were not similarly clustered around only planning two children. In fact, only 38 percent felt it was likely they would stop with two children and 29 percent were fairly sure they would be having at least one more child.

In order to gain a clearer understanding of this relationship, we looked at the four time periods separately. The relationship we expected -- that is, an increase in the amount of time spent working being associated with a decrease in anticipated future fertility -- was evident in the first time span. Of the women who had not worked before marriage, 33 percent planned to stay with two children, 20 percent were undecided, and 47 percent intended additional family. Of those who worked full-time more or less up until their first child was born, 56 percent planned to have no further children, 23 percent were undecided and 21 percent were going on for at least a family of three. This relationship held even when age at marriage was controlled for. Certainly a higher percent of women marrying under the age of twenty had not worked before their first child (29 percent compared to 6 percent of those marrying at over twenty-one years of age) but, even so, those that had were more likely than those that had not to want only two children.

In the second time period, the relationship disappeared. Women who had worked full-time between their children were the <u>least</u> likely to feel they would not be having additional children -- 31 percent claimed this as their intention versus 52 percent of those who had not worked during this time period. Conversely, 44 percent of the full-time workers were planning a third child versus 25 percent of the non-workers. This was

also the case with the third time period. Those women who were planning to return to full-time work within a year of the birth of their second child were the women most likely to claim they were planning more than two children -- 44 percent of the full-time workers said they were pretty sure they would have more children as compared to 24 percent of those who were not planning to return to work. Only 22 percent of the full-time workers were planning to stop with two children, whereas 55 percent of the women who did not anticipate working within a year of the birth of their second child were planning to limit their families.

The fourth time period likewise showed little relationship between future employment and fertility intentions. Women who never intended to work again were more likely to be planning additional children (75 percent) but, other than this, nothing was apparent. A similar percentage of women were planning to stop with two children, and have more than two children, regardless of when they saw themselves back in the workforce.

In the introduction to this section we suggested that sociologists have accounted for the usual relationship between fertility and employment either through the notion of role conflict or through the differential use of contraception. This second avenue will be examined when we consider our couples' experiences with birth control. Here we shall consider the notion of role conflict. The hypothesis was that because employ-

ment outside the home and motherhood were incompatible roles, women who wished to work would curtail their fertility. We qualified this hypothesis by suggesting that it was possible that it would hold only for those women who had some control over whether they would work or not -- if working was a necessity then it might be that the two roles would not be seen as incompatible. In order to help account for our divergent findings we looked at the reasons the working women had given for their working.

The first, and likely most important reason why we failed to find a relationship between employment and fertility was that our sample were all, by and large, devoted to familial roles. By looking only at women with two children, we appeared to have excluded the "working wives"[28] -- those women who are "primarily oriented towards the occupational world and who take time off from actual or potential employment to have children" (Tien, 1967: 226). Our women were not "career women" planning their families to fit in with fixed workforce participation intentions. Their priorities lay with childbearing and rearing and if they worked it was because the supplement to the family income was necessary or because the work was such that it in no way affected their primary role identification of wife and mother. For instance, the second time period was representative of the two other time periods and when we looked at the reasons the working women had given

for their working, 33 percent cited solely economic pressures -- if it were not for the necessary income, they would not work. Another 36 percent were working for economic and personal reasons but, in almost all of these cases, the primary push was economic;

> (Why work?) Money-wise. Mostly money-wise. And it was just nice to get out of the house one day a week. It wasn't until after I had gone in a few times, that I found myself kind of looking forward to it.

The remaining 30 percent were working for personal reasons, but in no case did we get the feeling of a woman "oriented towards the occupational world". The most common reason for working other than economic was "coping":

> I was just . . . we were just in a one bedroom apartment and it was just too small. I had to get out.
>
> My nerves were getting bad. I had to get out.
>
> The baby was so colick-y and my husband had broken both his legs and it was too much. It was just too much. I had to get away so I could feel myself to be a person. I couldn't cope.

The other major reason we likely failed to find a relationship between employment and fertility intentions was that the women most likely to put emphasis on their own career were the women with professional training and these women were at a relative disadvantage with regard to employment, particularly when they had young children. In their discussions of their futures, they came closest to the "working-wives"[29], but virtually all were quite prepared to take a few years off work to give their children "a good start in life". They were less apt to work, particularly with young children, because

the type of employment they had been trained for, and were planning to return to, would have involved them in a fairly demanding, time-consuming commitment. Conditions such as part-time or evenings-only were not normally available to them. Also, most of the university educated women were married to men with good jobs[30] and so, economically, they could afford to take four or five years out of the labour force.

On the other hand, the women most likely to be planning additional children were the women most likely, at this stage in their life-cycle at any rate, to find taking employment least upsetting to their primary roles of wife and mother. The occupational categories most likely to be planning the largest families were the other non-manuals and the skilled manuals and the wives in these families were, compared to the professionally trained, at a real advantage with regard to work. The majority had either a short training course or simply grade twelve and they were able to find part-time evening employment -- where the husband could babysit -- that was quite in line with what they had been doing before they started their families. The nature of the work tended to be undemanding -- work worries would not be carried over to the home -- and it was fairly easy to locate a convenient job -- local shopping centers are always trying to recruit these women. Hence, work, which for our potential "working wives" would have been very upsetting to their familial role, could easily be

accommodated by these women.

In concluding this section on the relationship between our women's employment histories and their future fertility intentions we would suggest that our results can not be used to accept or reject the role-conflict hypothesis. Our negative findings would appear to stem from the nature of our sample (the highly career-oriented were largely excluded) and from the point in time when the women were interviewed. Those women who were relatively more career-oriented than average were also more apt to want, and be able, to stay home with their children through the first few years. Those women who were working either had to work for economic reasons or were able to find work that did not really conflict with their primary role-identification as wife and mother.

The final aspect of sex role norms and behavior that we considered was the woman's attitudes towards "traditional" and "modern" role behaviors. Seven scales were used and all but two -- problematic husband and traditional husband -- showed some relationship with future fertility intentions. Rather than reproduce all the scales here, we created a role index from the five scales showing some relationship; women who scored "traditional" on three or more of the five scales and had no "modern" scores were recoded traditional, women who scored "modern" on three or more of the five scales and had no "traditional" scores were recoded "modern", and all others were assigned undecided. Table 4.22 pre-

sents the relationship between this index and future fertility intentions.

Table 4.22 Attitudes Toward Role Behavior by Future Fertility Intentions

Future Fertility Intentions	Role Behavior Orientation		
	Traditional	Undecided	Modern
Definitely/Probably No More Children	44 %	43 %	69 %
Undecided	26	24	17
Definitely/Probably More Children	30	33	14
Total N	27	42	36

The table indicates a relationship between attitudes toward role behaviors and future fertility intentions. Women who showed themselves to be modern on the role scales were most likely to feel they would have only two children -- 69 percent claimed this to be their intention versus 44 percent of those who were more traditional. Conversely, 30 percent of the traditional women wanted a third child and only 14 percent of the more modern women felt inclined this way.

The relationship was not as strong as we had anticipated, though, and seemed to stem in part from a reluctance on the part of our women to select answers indicating a traditional orientation. We became aware of this problem about half-way through the data collection period when we had to read out the sex-role scales to a woman who was unable to read them herself. From her conversation with us, we predicted she would have a

traditional orientation in the way Scanzoni (1975) used the term -- her concern, from her conversation and behavioral patterns, was decidedly in the interests of her husband and children. However, she began choosing responses which showed a mixed or modern orientation. Intrigued, we finally asked her to explain "why" she held the attitudes she did and her answer indicated that, in this day and age, it was in some way "embarrassing" to admit to traditional orientations.

> You hear all this talk about woman's lib. It's like it's kind of embarrassing just to have your family. Sometimes I don't know what I should think.

When we reviewed our interviews it did appear that there was a bias towards choosing answers which revealed a more modern orientation than we would otherwise have predicted. However, most of these women appeared to be choosing answers which would move them into the "undecided" category rather than the "modern" category; that may be why the "traditional" and "undecided" categories showed such similar response patterns. In light of this apparent bias, we collapsed the "traditional" and the "undecided" categories into one. Although this new scale was unable to reveal the range of attitudes we had originally wanted it to, we felt it would provide a more accurate assessment of our sample's attitudes toward role behavior.

We had suggested in our initial discussion that sex role orientation might be the avenue through which education influenced fertility intentions; through

further education women would widen their horizons beyond marriage and a family and wish to limit the number of children they had. As we have already pointed out, all our women seemed to value their families greatly and their careers minimally, but we did follow through to see if with the available range of attitudes there was any support for the thesis.

We initially looked at the relationship between the wife's education and her attitudes towards various role behaviors. Our hypothesis was that as education increased, so to would the percentage of women holding modern orientations. As Table 4.23 indicates, this was more or less borne out.

Table 4.23 Wife's Education by Attitudes Toward Role Behavior

Role Orientation	Wife's Education: Less Than Grade 12	Grade 12	Short Course	Trade Course	University
Traditional	70 % (14)	62 % (21)	69 % (18)	79 % (11)	45 % (5)
Modern	30 (6)	38 (13)	31 (8)	21 (3)	55 (6)
Total N	20	34	26	14	11

The table indicates that as level of education increases, so too does the percent of women holding modern orientations. For instance, 70 percent of the women with less than a grade twelve education had traditional orientations as did only 45 percent of the women who had attended university. The one exception to the trend, and an exception which provides further support for our hypothesis, was the women with a trade training; the

majority of them held traditional views (79 percent). The reader may recall that when we previously considered education, we found that the women with trade training were most likely to be planning a third child. It does appear now that this might well be because the majority of them held a traditional orientation.

To clarify the patterns of association, we looked at the relationship between the wife's education and her intentions regarding a third child controlling for sex role norms. Table 4.24 presents the results.

Table 4.24 Percent of Women Who Feel They Probably or Definitely Will Not Have a Third Child by Wife's Education and Attitudes toward Role Behavior

Role Orientation	Wife's Educational Level: Less Than Grade 12	Grade 12	Short Course	Trade Course	University
Traditional	36 % (14)	38 % (21)	61 % (18)	36 % (11)	40 % (5)
Modern	50 % (6)	77 % (13)	88 % (8)	0 % (3)	83 % (6)

Total N's in brackets.

The table indicates that role orientation does appear to be one medium through which education influences future fertility intentions. In each educational category (except amongst those with a trade training), those women with more modern attitudes were those more apt to feel their families were complete. Controlling for sex-role orientation reduced the impact education had on future fertility intentions. In fact, among those with a traditional orientation toward sex role behavior, education had virtually no influence -- more or less equal

percentages of women were planning to have only two children regardless of their educational level. Among those with a modern orientation, education had a slightly greater effect; however, not as great as it was when sex role orientation was not being held constant. Our conclusion is that there is some validity to the thesis that sex role orientation is the medium through which the influence a woman's education has on her fertility intentions operates.

The one remaining problem is why women with a trade training held such traditional views. We had hypothesized that increased education exposed a woman to more liberalising influences. Women with trade training certainly had more education than average, but they did not appear to hold more liberal attitudes. Our explanation is purely speculative, but when we looked at the fourteen women with a trade training we found that eleven of them were nurses. It could well be that exposure to a nursing course is unique -- rather than fostering liberal attitudes, it encourages traditional ones. It might also be, of course, that women with traditional orientations are particularly likely to take nursing courses.

In this "sex role norms and behavior" subsection, we have examined the influence a woman's educational level, her employment history and her attitudes toward traditional and modern role behaviors have on her future fertility intentions. We argued that with the expansion

of female educational and occupational opportunities, and the increasing ability to control unwanted fertility, a woman's behavior is more likely than ever to be the result of her own individual desires. With regard to education, we found that the probability of having a third child decreased as educational level increased. The one exception to this trend was the women with a trade training; they, more than any other educational group, were planning to have a third child. When we introduced sex-role orientation into the relationship, we found a partial explanation for our pattern of results. With sex role orientation held constant, the range of variation due to education was sharply reduced. The relationship we had initially found was because most women with a university education had modern orientations (defined in our terms as having stronger preferences for the wife's individualistic interests) and most women with less than a grade twelve education had traditional orientations (defined in our terms as having a greater concern for the interests of the husband and children). The women with a trade training appeared to be exceptional on the educational dimension because they held traditional orientations. We had hypothesized that women with more education would have more modern orientations because education has a liberalising influence. However, the majority of our women with a trade training were nurses and we could only suggest that training as a nurse is unique -- either particularly traditional women are drawn

to the course and/or the course itself fosters traditional views. Our employment variables, by and large, did not show the pattern of relationships we had expected them to. The length of time a woman had worked was not related in any systematic way to her future fertility intentions. We had hypothesized that because employment outside the home and motherhood are incompatible roles, at least amongst those who work for other than solely economic reasons, women who worked would curtail their fertility. Our lack of empirical support might well have stemmed from the fact that, with general levels of female employment increasing, the hypothesis itself is faulty; it could also have been due to the fact that most of our women were primarily oriented to their children and husbands and if they were working, it was because the extra income was essential or because the nature of the work did not interfere with their primary role identifications. The women who were less traditionally oriented than average (but still, we should point out, far from the stereotyped "career woman") were the university educated and, although their employment opportunities would likely have been financially profitable, this extra income was not normally needed and the nature of the work would have interfered with their basic identifications as wife and mother.

Antipathy Towards Children

The fourth, and final, taste factor we considered was "antipathy towards children". By this we meant how well the woman liked children. Although the variable does not appear to have received much attention in the literature (for instance, it was not included in studies by Cartwright, 1976; Askham, 1975; Beaujot, 1975 or Westoff and Ryder, 1977), there appeared, in the pre-tests, to be a relationship between a woman's intentions regarding a third child and her general antipathy towards children.

We measured the factor through an attitudinal scale that Woolf (1971) first outlined. Through a series of steps five attitudes related to family size were outlined, one of which was termed "antipathy to children". (The previous section on direct costs discusses her measures in greater detail). Women scoring high on this attitudinal measure endorsed the view that children were an encumbrance -- they "tied you down", "got on your nerves" and so on. Women scoring low on the measure disagreed that children were a burden and, in fact, found them quite "satisfying".

Woolf found that women with one child expressed the least antipathy towards children, and that the extent of the antipathy increased with an increase in family size, except for the very largest families. The greatest degree of antipathy, however, was expressed by women with no children. She accounted for this surprising

relationship by suggesting that "antipathy is a consequence of having a larger family and not a determinant" (Woolf, 1971: 108).

We decided to use this measure because all our women had the same number of children and, as we mentioned, in the pre-tests, various degrees of antipathy were expressed and seemed to be related to future fertility intentions. Women were asked if they agreed or disagreed with the following set of questions:

1. Children tie you down too much.
2. Children get on your nerves, most of the time.
3. Children are selfish; it's all give and no take having children.
4. Women only have babies because they feel they ought to have babies.
5. Most women find motherhood satisfying.

Those endorsing the view that children were an encumbrance (i.e. agreed with the first four questions and disagreed with the last) were scored "high" and those rejecting this idea were scored "low". In actual practice, nobody had a perfect "high" score, so all women who felt children were an encumbrance on two or more of the statements were scored "high". Table 4.25 presents the relationship between antipathy towards children and future fertility intentions.

Table 4.25 Antipathy Towards Children and Future Fertility Intentions

Future Fertility Intentions	Antipathy Towards Children: Low	High
Probably/Definitely No More Children	47 %	62 %
Undecided	21	24
Probably/Definitely More Children	32	14
Total N	68	37

As the table indicates, there does appear to be a relationship between the two variables. Women who had a high degree of antipathy towards children were more likely to feel their families were complete -- 62 percent of those with a high antipathy score said it was unlikely they would have a third child compared to 47 percent of those with a low score. Alternatively, 32 percent of those with a low degree of antipathy felt it likely they would have more children versus 13 percent of the others. This relationship held at all levels of wife's education; however, when the husband's occupational level was introduced into the analysis, an interesting interaction effect appeared. Table 4.26 presents the results. The professional-managerials and other non-manuals were combined into one category because they showed a similar pattern of association. This was also the case with the skilled and unskilled manuals and they were likewise combined.

Table 4.26 Antipathy Towards Children by Future Fertility Intentions for Non-Manual and Manual Occupational Categories

	Non-Manual Category		Manual Category	
	Antipathy		Antipathy	
	Low	High	Low	High
Probably/Definitely No More Children	44 %	80 %	49 %	50 %
Undecided	16	13	24	32
Probably/Definitely More Children	40	7	27	18
Total N	27	15	41	22

The table indicates that the relationship between antipathy towards children and future fertility intentions holds only for the non-manual occupational category. For the manual class, there appears to be no relationship between the two variables -- women were as apt to be stopping with two children if their antipathy score was high or low.

As we mentioned previously, this variable -- "antipathy towards children" -- has been relatively ignored in the literature and this makes it difficult to know how to assess our results. Askham (1975) suggested that the lower social classes have unique motivations and rationalities in regard to fertility intentions and this might be one area where there is a difference between the social classes. Studies such as Hannah Gavron's (1966) have found that working-class women have greater difficulties coping with their children than middle-class

women. Certainly, women who batter their children are more apt to come from the lower social classes (see, for instance, S. M. Smith, 1975). It is possible that our pattern of results stems from the fact that level of antipathy towards children does not influence the decision a woman in a manual social class makes regarding a third child because children are "expected" to be troublesome[31]. Whether she herself likes or dislikes children is not a factor in future fertility considerations. A woman in the non-manual social class, on the other hand, may be more apt to consider her own feelings regarding children before deciding on a third one because children are generally not expected to disrupt the couple's lives.

This is frankly speculative. In the interviews, "personal stress" seemed an important factor in the desire for more children. Women, particularly women in the non-manual social class, who seemed to find it difficult to manage their homes and their present two children were least likely to consider going on for three. Our measure of antipathy certainly singled out the extreme cases and this is reflected in the above relationships; however, as we mentioned, the majority of women gave answers indicating very low levels of antipathy. In observing the women we knew there was a greater range of antipathy than was expressed, but our questions were unable to pick this up. We would suggest that antipathy towards children is an important factor in fertility

decision making and deserves a more comprehensive examination in future fertility studies. Our feeling is that we have only begun to uncover its influence in this present investigation.

4.4 Summary

In this chapter of the thesis we have examined the impact of various income, price and taste factors on our couples' future fertility intentions. We had argued that, at any given point in time, couples have certain tastes which they attempt to maximize, as best they can, given what they know about their incomes and the prices of children. As our dependent variable we used the probability of a couple having a third child. We did not believe that asking about completed fertility was acceptable -- it assumes couples have a reproductive target in mind and does not allow for the highly situational nature of fertility decision making to be adequately assessed.

Our quantitative analysis indicated that it was middle income couples who were most likely to be considering a third child. Couples whose incomes were greater than average and couples whose incomes were less than average had a greater probability of wanting only the two children. This was reflected in our social class differences. Using the husband's occupation as our indicator of social class, we found that it was the professional-managerials and the unskilled manual workers who were least likely to want or be planning a third

child. It appeared that the primary reason for the unskilled manuals not wanting a third child was economic. They all had inadequate (or barely adequate) resources for two children, few had any realistic hopes that their economic situations would greatly improve, and hence two children were "more than enough".

Our analysis of costs was far from adequate. Our indicators of direct costs did not differentiate between the social classes in the way we predicted they would -- that is, the higher social classes did not show themselves, on our indicators, to be under greater social pressure to spend money on their children than the lower social classes. In our re-analysis of the data we confined our examination to the specific social classes and, amongst the non-manual social class, there did appear to be some "play-off" between the "quality" and "quantity" of children. Non-manual couples who felt that many commodities were important for children were less likely to be considering a third child than non-manual couples who felt commodities were unimportant for children. This relationship did not hold for the manual couples, however, and because of the difficulties in validating our indicators, the results must be considered speculative. Indirect costs, at least in the manner we measured them, did not appear to influence the decision regarding a third child. There were undoubtedly differences between women in the indirect costs of bearing and rearing children, but we could find no evidence of those women standing to lose more, in economic terms, by having

children being less likely to be considering a third child.

A wide variety of taste variables appeared to influence our couples' intentions regarding a third child and we will present these in point form.

a. The couples' ideal family (in terms of size and sex composition) was the first taste factor we considered and it appeared that sex composition did influence the probability of a couple having a third child. Most couples wanted at least one boy and one girl, and hence those whose first two children were of the same sex were more likely than average to be considering a third child. Couples whose ideal family size was larger than two also showed a greater likelihood of considering a third child; however, since most couples' ideal family size was two, there was very little variation to consider.

b. Couples where the wife had interests outside the home (that is, she socialised at least monthly without her husband and children) were more likely to be considering a third child than couples where the wife did not have interests outside the home. We accounted for this empirical finding through a "coping" dimension. From the qualitative analysis of the data, it appeared women who were having difficulties coping with their present two children, were least likely to be considering a third child. Further, it appeared that, by and large, women who were coping well all had outside interests. Women who were not coping, and who were less likely to want a third child, were also less likely to have interests outside their homes.

c. A variable related to the coping consideration was antipathy towards children. We found, although only amongst the non-manuals, that the more a woman did not like children the less likely she was to be considering a third child. To what extent antipathy towards children and ability to cope are related, remains open to investigation. We would suggest that theoretically they are distinct, although our measure of antipathy did include coping elements. These two variables have not been thoroughly or systematically examined in the literature and hence our rather indirect (and possibly confusing) attempts at measurement. Our analysis suggests that both variables are important in fertility decision making, though, and deserve a more direct examination.

d. A decline in the wife's satisfaction with her relationship with her husband was positively related to the probability of having a third child. Women in all social classes who assessed the relationship they had with their husbands as less than good were less likely to be considering a third child. Our suggested explanation for this was that women who were having difficulties in their marriage with two children would be most hesitant to have a third either because this child would add further strain to the relationship or because, in the event of a marital break-up, there would be an additional child involved.

e. Wife's education (the one control variable we considered in the taste section) was found to be negatively related to the probability of having a third

child, with the exception of those women with a trade training. A large part of this relationship appeared to operate through the woman's attitudes towards "traditional" and "modern" sex role behavior. Women with a university education, by and large, held a "modern" orientation (which, by our definition, meant they were largely oriented towards the wife's individualistic needs) and this, we hypothesized, was why they had a low probability of wanting a third child. Conversely, women with less than a grade twelve education held more "traditional" orientations (which, by our definition, meant they were more oriented towards their children and their husbands) and hence they had a greater probability of planning a third child. Women with a trade training appeared to show a high probability of wanting a third child because they tended to hold "traditional" orientations.

f. The one other taste variable we considered was the woman's work behavior. This did not show the relationship we had hypothesized it would; women with the longest and most intense (i.e. full-time versus part-time) work experience did not show any unique probability of having or not having a third child. During the qualitative analysis it appeared that this lack of results was because all our women were, by and large, devoted to familial roles. Women with greater work experience had not, and were not, planning their families to fit in with fixed work force participation intentions, but because their work was essential for economic reasons

or was such that it did not conflict with their primary role identification as wife and mother.

In conclusion, in this chapter we have seen that a variety of taste and income factors influence the probability of couples having a third child. In the next chapter, we shall consider the influence of these factors on the timing and spacing of the couples' two children. We shall then consider the couples' perceived fecundability and their experiences with birth control so that in the final section, with the aid of the qualitative analysis, we can accomplish the task we set for ourselves -- that is, we can explore the various patterns of family formation; why women have the families they have and why they want the families they are planning to have.

In the last chapter we considered the influence of income, prices and tastes on a couple's future fertility intentions. We saw that people do have certain tastes in regards to children which they attempt to maximize subject to the constraints of income and prices. In this chapter we shall consider how these three factors influenced the timing and spacing of the couples' two children. Here, as in the previous chapter, we shall begin the analysis by considering the influence of the three background variables: age at marriage, religion and social class. Our fourth background variable -- wife's education -- will again be examined when we consider the influence of the woman's sex role norms and behavior.

Timing to first and second birth can be visualized in two separate ways; one may consider timing to the actual births or timing to when the couples first began "trying" for a child. Most studies[1] have used the first measure -- the time period under study has been the time period ended by the birth of a child. We, on the other hand, are intending to use the second measure -- our study time period will be ended by when the couples first began "trying" to conceive[2].

We began our analysis by trying to use the traditional measure and quickly found that very few variables had any recognizable influence on the timing and spacing dimension. Through the ongoing qualitative analysis,

however, we were suspicious of the lack of results. Our interpretive understanding of the questionnaires led us to believe that couples did vary in how they wanted their families built up and that these differences could partly be explained by income, price and taste considerations. It did not take us long to realize that the analysis of the timing and spacing dimension was being confused through problems of sub-fecundity, foetal mortality from involuntary causes and the failure of contraceptive techniques. Couples who held very similar ideas about, for example, when a family should be begun often ended up in very different coding categories because of one or the other's failure with contraception or problems with conception. Using time periods which ended when the couples began trying for a child, rather than when they actually had a child, circumvented this problem.

The only difficulty encountered using these coding categories was with women who did not "plan" their first or second child -- the child was conceived either through a contraceptive failure or when a "chance" was being taken. With regard to first births, only five children were conceived within marriage as a result of a contraceptive failure and these five cases were not included in the analysis. The women's comments on when they would have liked this first child, though, were examined to see if they conformed to the observed trends. There were, in addition, twenty-six children conceived premaritally, of which only seven were said to be "planned".

We considered all of the premaritally conceived first children separately and not in great detail; there is a long and interesting literature on premarital pregnancy[3], and we were more interested in this study in marital fertility. Finally, the three women who were no longer with the father of their first child had to be excluded from analysis because we had not asked them about why they had wanted their first child when they did. The exact breakdown of time periods between marriage and first trying for a child for the women who had planned this child was as follows:

Interval between marriage and beginning to try for first child:	N
6 months or less	13
7 months to 18 months	23
19 months to 30 months	19
Over 30 months	16

With regard to the second birth, fifteen couples had to be excluded from analysis because their second child was not planned, but as in the case with the first births, their questionnaires were examined to see if their comments on when they would have liked their second child conformed to the observed trends. The exact breakdown of spacing categories between the first child and beginning to try for the second child was as follows:

Interval between birth of first child and beginning to try for second child:	N
9 months or less	21
10 months to 14 months	26
15 months to 23 months	25
Over 23 months	18

5.1 Influence of Background Factors

As we have said, most research on fertility decision making has concentrated on anticipated family size; concerns such as timing and spacing may be mentioned, but little analysis of the trends has usually been undertaken. Our research is, moreover, not strictly comparable to previous research because of the nature of our dependent variable. Hence, we shall refer to the previous literature in this chapter where possible, although in many cases this may appear far from satisfactory.

Age at marriage and the relationship this has with the timing to the first birth has been a concern with a number of researchers (see, for example, Cartwright, 1976; Peel and Carr, 1975) and the primary conclusion of their studies has been that the younger a couple is at marriage, the more apt they are to be prenuptially pregnant[4]. Cartwright, for instance (1976: 34), found that two-fifths of the mothers who married while they were still in their teens were pregnant at the time and that teenage marriages accounted for 64 percent of the premarital conceptions. This also was the case with our sample couples. Approximately seventy-five percent of our premarital pregnancies were to women under the age of twenty, and forty-five percent of the women who married when they were still teenagers were pregnant at the time. An equally interesting finding, though, is revealed in Table 5.1. In this table age at marriage is cross-tabulated with when the couple first began

trying for a child -- all premarital pregnancies are excluded as well as contraceptive failures.

Table 5.1 Wife's Age at Marriage by Months Between Marriage and Time Couple First Began Trying For a Child

	Wife's Age at Marriage		
Timing to First	Under 20	20, 21	Over 21
6 Months or less	42 %	4 %	15 %
6 - 18 months	26	38	31
18 - 30 months	21	31	27
Over 30 months	11	27	27
Total N	19	26	26

Table 5.1 indicates that women who married young were most likely to begin their families immediately -- 42 percent of the women who married when they were teenagers started trying for a child within six months of their marriage, as compared to only 4 percent of those marrying when they were twenty or twenty-one and 15 percent of those marrying when they were over twenty-one. Thus it appears that there is more to be explained in the relationship between age at marriage and family size than a reference to differences in the efficiency of fertility control would imply[5]. There is still a relationship between age at marriage and timing to the first birth amongst those planning their families, and to this extent some notion of social selection would be appropriate. Women who married young wanted families, and began trying for families, sooner than women who married later.

We could find no study which looked at the relationship between age at marriage and the spacing between children, although both Cartwright (1976: 41) and Askham (1975: 30) commented that women who had their first pregnancy in their teens had more children on average than those who started their childbearing later, even when controlling for length of marriage. This might imply closer birth spacing and, in fact, in Askham's study does. For our women there was little relationship between age at marriage and when the second child was wanted. Most couples -- regardless of the age they married -- wanted their second child to be born one and a half to two and a half years after their first. Women who married when they were still teenagers were no more likely than those marrying when they were over twenty to want their children closely spaced. We are, of course, concerned with the couples who did plan their children and it may be that most teenage wives are inefficient contraceptive users and hence do have their children more closely spaced than average. Amongst our women, though, this explanation was not satisfactory. More or less equal percentages of women in each of the age at marriage categories (21 percent, 20 percent and 10 percent in the age groups under twenty, twenty or twenty-one and over twenty-one respectively) had an unplanned second child, and hence we would have to conclude that age at marriage had little impact on the timing of the second child.

Religion and its influence on the timing and spacing of children has been a relatively ignored topic; Balakrishnan, Kantner and Allingham (1975) commented that, in their Toronto study, variations of half a year or more in child spacing were observed by religion; however, no further information was provided as to the nature or direction of the differences or to the religious groups involved. Amongst our sample there was little difference between Protestants and Catholics (either using husband's or wife's religion) in when they began their families -- for instance, 7 percent of Protestant wives and 13 percent of Catholic wives began trying for their families within six months of their marriage and 26 percent of Protestant wives and 30 percent of Catholic wives delayed for over thirty months. There did appear to be some tendency for those with no religion or a religion other than Protestant or Catholic to be prompt starters. As we have commented before, most of the couples in our sample who had other religions held high family size aspirations. Three of the five couples also did not believe in birth control and hence the high percent (50 percent of the wives and 60 percent of the husbands) of those with other religions who began trying for a family immediately after marriage. Women and men with no religion were also more likely than average to begin their families quickly -- for instance, 31 percent of the wives with no religious affiliation began trying for children within six months of their marriage and only 8 percent delayed for over

thirty months. We have no explanation for this as yet; the women who married when they were teenagers were no more likely to have no religious affiliation than their older counterparts[6], and there was no apparent reason for why they tended to begin their families so quickly.

Looking at the spacing between children, Table 5.2 suggests a slight tendency for Catholics to space their children closer than Protestants -- for instance, 31 percent of Catholic wives began trying for the second

Table 5.2 Husband's and Wife's Religious Affiliation by Space Between First Child and When Couple Began Trying for Second

Wife's Religious Affiliation

Timing to Second	Protestant	Catholic	Other	None
Under 9 months	18 %	31 %	60 %	6 %
10 - 14 months	38	19	20	31
15 - 23 months	26	31	20	25
Over 24 months	18	19	0	38
Total N	35	34	5	16

Husband's Religious Affiliation

Timing to Second	Protestant	Catholic	Other	None
Under 9 months	23 %	31 %	60 %	0 %
10 - 14 months	36	21	0	35
15 - 23 months	23	31	40	29
Over 24 months	18	17	0	35
Total N	39	29	5	17

child within nine months of the birth of the first child versus 18 percent of the Protestant wives. This difference quickly disappeared though; more or less equal percentages of Protestants and Catholics were trying for their second child by fourteen months. The biggest difference was with the couples with other religions. Sixty percent of them began trying for their second child within nine months of the birth of the first one and again the explanation appeared to stem from their large family size ideals and their dislike of contraception. The women and men with no religious affiliation were the most likely to wait before having their second child -- approximately 35 percent waited until their first child was at least two years old before trying for their second and, as before, we have as yet no explanation for this. Religious affiliation was not related to age at marriage and there was no apparent reason why couples with no religious affiliation had their first child quickly, then waited for their second.

Social class and its effect on the timing and spacing of children has received more attention than religion, but analysis often ends by pointing out the high rate of prenuptial conceptions amongst the semi- and unskilled working class (see, for instance, Askham, 1975; Cartwright, 1976). In our survey, this relationship between premarital conceptions and social class was also apparent -- the husbands of 46 percent of the premaritally pregnant women had semi- or unskilled occupations -- however, as Table 5.3 indicates, there was a relationship beyond this.

Table 5.3 Social Class by Months Between Marriage and Time Couple First Began Trying for a Child

Timing to First	Occupational Categories: Prof.-Man.	Other Non-Manual	Skilled Manual	Unskilled Manual
Under 6 months	5 %	0 %	30 %	33 %
6 - 18 months	30	25	33	42
18 - 30 months	20	67	22	8
Over 30 months	45	8	15	17
Total N	20	12	27	12

It is apparent from Table 5.3 that there was a correlation between social class and timing to the first child, not only amongst those conceiving the first child premaritally, but also amongst those who planned this child. Working class couples were more apt than middle class couples to begin their families within the first year and a half of marriage -- for instance, 75 percent of the semi- and unskilled occupational class began trying for a child within the first eighteen months of marriage as compared to 35 percent of the professionals and 25 percent of the other non-manual workers. Conversely, 45 percent of the professionals delayed 30 months or more before beginning to try for a child as compared to only 15 percent of the skilled manuals and 17 percent of the semi- and unskilled workers. Clearly social class had an influence on when the first child was wanted.

Cartwright (1976: 109 - 110), possibly to circumvent problems with sub-fecundity and foetal mortality, asked her respondents whether they felt it was "appropriate

to start a family straight away after marriage". In a way reflective of our results, more working class mothers felt it was appropriate to begin a family immediately than middle class ones. Their ideas also supported their actions: more social class V mothers had children within the first two years of marriage than social class I mothers. Cartwright continued her analysis of the relationship between social class and spacing to the first child to include age at marriage because of its relationship with social class and spacing to the first child. She found that both variables -- age at marriage and social class -- were independently related to the mothers' views and experiences of the interval between marriage and the first child.

For our women, as well, there was a correlation between social class and age at marriage[7], and hence we expanded our analysis to sort out the relationships. Table 5.4 presents the percent of women who began trying for a child within six months of their marriage, and the percent who delayed trying for thirty months or more, by the women's age at marriage and their social class. Social class was collapsed into two categories; as before, middle class included the professional-managerials and the other non-manuals and the working class included all the manual workers.

Table 5.4 Age at Marriage and Social Class of Women Beginning to Try for Child Within Six Months of Marriage and After Thirty Months of Marriage

	Age at Marriage		
	Under 20	20, 21	Over 21
Percent Beginning to Try for First Within Six Months			
Middle Class	0 % (4)	0 % (10)	6 % (18)
Working Class	57 % (15)	6 % (16)	37 % (8)

	Age at Marriage		
	Under 20	20, 21	Over 21
Percent Delaying to Try for First for Thirty Months or More			
Middle Class	25 % (4)	30 % (10)	29 % (18)
Working Class	7 % (15)	25 % (16)	19 % (8)

Figures in brackets are the number of mothers on which the percentages are based (= 100 %).

It appears from Table 5.4 that working class couples were more likely than middle class couples to begin their families quickly after marriage, regardless of the age they married. In all age at marriage categories, more working class couples than middle class ones began their families promptly. Age at marriage, interestingly enough, lost much of its predictive power[8]. There was a slight tendency for those with similar social class backgrounds who married younger to begin trying for their families sooner than those marrying when older (for instance, 57 percent of the working class women who married when they were under twenty started trying for a child within six months of their marriage versus 37 percent of those who married when they were over twenty-

one); however, the differences were not as distinctive as they were when social class was not involved in the analysis. Our conclusion would have to be that it is social class in particular which has an important influence on when couples begin trying for their first child.

Social class also helps explain the tendency we saw earlier for the women with no religious affiliation to begin their families quickly after marriage. Just over 65 percent of the women who claimed they had no religious affiliation were from the two manual social classes and if religion and social class were held constant, then the tendency for those people with no religious affiliation to begin their families promptly was apparent only amongst the skilled and semi- and unskilled manual classes. It seemed that it was not the lack of religious affiliation per se which influenced couples to have their first child quickly, but the fact that most of these couples were from the manual social classes.

With regard to the influence social class has on the spacing between children, Cartwright found (1976: 110) that the only difference in her sample couples was in the proportion for which the space was less than a year. The reported differences were not large, however -- 3 percent of the working class mothers and less than 1 percent of the middle class mothers had their last two children spaced within a year of one another. Askham found (1975: 30) that most of her spacing differentials were between couples with two and couples with

four children, although slightly more of the social class III group waited over two years between the delivery of the first and second child than of the social class V group (83 percent compared to 67 percent, all of whom had only two children). In Canada, Balakrishnan, Kantner and Allingham (1975) observed almost no variation in child spacing between children by husband's occupation. This was also the case with our sample couples, as is indicated in Table 5.5.

Table 5.5 Social Class by Space Between First Child and When Couple Began Trying for Second

	Occupational Categories			
Timing to Second	Prof.-Man.	Other Non-Manual	Skilled Manual	Unskilled Manual
Under 9 months	19 %	36 %	26 %	15 %
10 - 14 months	33	29	34	15
15 - 23 months	29	29	20	40
Over 23 months	19	7	20	30
Total N	21	14	35	20

There appeared to be very little relationship between social class and spacing between children and, if anything, it was in a way opposite to that suggested by Cartwright and Askham. Although differences were small, the working classes seemed more apt to delay their second child than the middle classes -- for instance, 23 percent of the manual classes delayed two years or more between their children compared to 14 percent of the middle classes. Conversely, 22 percent of

the manual classes and 26 percent of the middle classes began trying for a second child within nine months of the first child. As we have said, the differences are small but they do indicate a trend opposite to that suggested in the two British surveys.

In this introductory section on timing and spacing we have looked at the relationship between age at marriage, religion and social class and the timing and spacing of our couples' two children. Little about the spacing between children was uncovered, other than the tendency for those with other religions to space their children closely. This was accounted for by these couples' large family size aspirations and their dislike of birth control. Our examination of the timing to the first birth was more fruitful. The common relationship between premarital conceptions and social class and age at marriage was uncovered, as well as a relationship indicating that a young age at marriage and inclusion in the working classes meant a greater tendency to begin a family shortly after marriage. In the next two sections we shall consider income, price and taste considerations, always bearing in mind the control variables, to uncover more about how our couples have built up their families.

5.2 Income and Price Variables

In the previous chapter we looked at the influence of a number of income variables on the couples' desires for more children. These income variables all dealt

with the couple's current economic position and, unfortunately, this was all the information we obtained. Because of the difficulties we anticipated in having the women remember their income, or even general financial position, at the time they began trying for their two children -- and the unmeasurable amount of unreliability in their responses -- we decided to limit our analysis to an examination of the impact of current economic standing on past timing decisions. Freedman and Coombs limited (1966: 647-648) their study in this way and found "the timing of births after marriage has a strong and consistent relationship to economic position. . . . Whether measured by current income or accumulation of several types of assets, a couple's economic position is substantially better the longer the interval to the first or last birth. Those wives already pregnant with their first child at the time of marriage are particularly disadvantaged economically". Freedman and Coombs' results were not a function of the longer marriage duration of those without premarital pregnancies and long birth intervals -- the relationship was apparent even when length of marriage was controlled. They concluded that "those who have their children very quickly after marriage find themselves under great economic pressure, particularly if they married at an early age . . . They are less able than others to accumulate the goods and assets regarded as desirable by young couples in our society. They are more likely than others to become

discouraged at an early point and to lose interest more quickly than others in the competition for economic success".

Amongst our couples, the premaritally pregnant in particular showed patterns similar to those discussed by Freedman and Coombs. Couples who conceived their first child premaritally were in a poorer economic position now than those who began their families after their marriage. Amongst those who were not premaritally pregnant, there was some relationship between timing and income, but not to the extent witnessed by the premaritally pregnant. Table 5.6 presents the relationship between husband's income and when the couple first began trying for a child with the premaritally pregnant included in a separate category.

Table 5.6 Husband's Income by Months Between Marriage and Time Couple First Began Trying for a Child

Husband's Income	Pre-maritally Pregnant	Timing to First Within 6 Months	6-18 Months	18-30 Months	30 Months or More
Under $12,000	35 %	0 %	9 %	6 %	0 %
$12,000 - $15,000	39	42	24	17	25
$15,000 - $20,000	9	33	38	61	44
Over $20,000	17	25	29	17	31
Total N *	26	12	21	18	16

* Information on their husband's income could not be obtained from four women.

Although Freedman and Coombs' (1966) results were not a function of the length of time a couple had been

married, our results possibly could be. It might be argued that a premarital pregnancy pushed couples into a marriage and family sooner than they would otherwise have chosen and that the lower incomes they were earning now were just a function of being "one step behind" in their careers. We looked more closely at the premaritally pregnant and this argument did not seem applicable. Only two of the eight couples who were premaritally pregnant and earning under $12,000 were in apprenticeships -- the rest were working at occupations where they would always be earning below average wages. Moreover, the two in apprenticeships, were in apprenticeship to low-paying occupations (i.e. cook). It would be incorrect to conclude that the relationship between income and premarital pregnancy was due solely to an age-related factor -- as with Freedman and Coombs' data, we would expect that these couples, at each stage of family formation, will be earning the below average incomes.

Freedman and Coombs did find that the relationship between timing of births after marriage and economic position held for all couples, not only the premaritally pregnant. This was only slightly the case with our data[9]. Couples who waited over thirty months to begin trying for their first child were marginally better-off now than those who began trying within six months (for instance, 75 percent of the couples waiting thirty months to try for their first child had incomes over $15,000 at present versus 58 percent of those who began trying for their families within six months of their marriage),

but a large part of this relationship was accounted for by the relationship between social class and income. Social class and husband's income were, not surprisingly, related amongst our sample couples[10], and when it was controlled for, the relationship between income and timing to the first child was largely attenuated. Those few couples for whom income did not correspond with husband's occupation (i.e. a high status job, but low pay or a low status job with high pay) tended to follow spacing patterns more characteristic of their social class categorization than their income categorization[11].

Freedman and Coombs suggested (1966: 648) that couples who have their children quickly may do so in spite of the possible economic ramifications, because they prefer children to the economic gains they may forego. They then rejected this explanation with the finding that "the proportion of wives dissatisfied with the timing of their births increases rapidly as the interval between marriage and successive births decreases". Amongst our sample couples this explanation could not be rejected and, in fact, is one of the key themes in the qualitative analysis of Part III. The majority of women in each of our spacing categories (other than the pre-maritally pregnant classification) were pleased with the spacing of their child. In fact, the majority who were not pleased with when their first child was born tended to have trouble conceiving or carrying a child to term. By definition, our spacing categories were the time periods between marriage and when a couple started trying

for a child, and most couples began trying for a child when they wanted one or, at the very least, were not "bothered" if they had one. Differences were apparent between the social classes (and income groups) in regards to when a first child was wanted, and we would argue that this was precisely because some social classes "preferred children to economic gains" -- or, possibly more accurately, did not see in children economic gains that would have to be "foregone". As we just mentioned, this is a key theme in the qualitative analysis and the reader is referred to Part III for a complete discussion.

Turning now to price considerations[12], we shall consider only child-quality standards. We have serious reservations whether or not "indirect costs", as the economists use the term, are a factor influencing a woman's fertility decisions (see discussion in previous chapter) and hence will not consider their impact on the timing and spacing dimension. Child-quality standards, to repeat, were the level of material comfort with which the couple felt it was necessary to provide each of their children. Couples who held high child-quality standards felt it was important to provide their children with numerous commodities, those with low standards felt these commodities were unimportant. In the previous chapter, because we were unable to validate how relevant our indicators were to all members of our sample, we proceeded with the analysis only within occupational categories. We felt that this would, to some degree, control for selected taste-forming factors. This we

also did here and Table 5.7 presents the relationship between child-quality standards and timing from marriage to when the couple first began trying for a child for the manual and non-manual social classes. Again we collapsed our occupational categories because all the non-manual workers showed similar patterns of relationship, as did the manual workers.

Table 5.7 Child-Quality Standards by Months Between Marriage and Time Couple First Began Trying for a Child Controlling for Social Class

	Non-Manual Occupational Category		Manual Occupational Category	
	Direct Costs		Direct Costs	
Timing to First	Low	High	Low	High
Up to 6 months	7 %	0 %	35 %	27 %
6 - 18 months	29	28	36	36
18 - 30 months	43	33	12	23
Over 30 months	21	39	18	14
Total N	14	18	17	22

One would expect couples with high child-quality standards to delay the birth of their first child so that the various highly rated commodities could be acquired. This tendency is apparent in the relationship for both the manual and non-manual social classes but the differences are slight. Couples who judge the direct costs of children to be high or low certainly show no distinctive trends -- more or less equal percentages wait the various time spans.

In trying to account for this lack of relationship we looked at the interviews and it became apparent that the list of commodities we were using were not particularly relevant for the first born child. New clothes and toys, separate bedrooms, a backyard and yearly holidays may or may not have been important to "children", but were usually seen as not important for a baby. It was by the time the second child was being planned that these commodities proved more useful in differentiating those couples with high child-quality standards from those with low. At this stage in the family formation process, there was one child who could conceivably benefit from the material goods. Table 5.8 presents the relationship between child-quality standards and the interval between the birth of the first child and when the couple began trying for the second for the two social classes.

Table 5.8 Child-Quality Standards by Space Between First Child and When Couple Began Trying for Second Controlling for Social Class

	Non-Manual Occupational Category		Manual Occupational Category	
	Direct Costs		Direct Costs	
Timing to Second	Low	High	Low	High
Under 9 months	43 %	14 %	30 %	14 %
10 - 14 months	21	38	35	21
15 - 23 months	21	33	27	27
Over 23 months	14	14	8	38
Total N	14	21	26	29

It appears from Table 5.8 that couples with low child-quality standards have their children closer together than those with high child-quality standards. The top two modal categories for spacing between children for the wives of manual workers who held low child-quality standards were under nine months (30 percent) and ten to fourteen months (35 percent). The top two modal categories for the wives of manual workers who held high child-quality standards, on the other hand, were fifteen to twenty-three months (27 percent) and twenty-four months or more (38 percent). The relationship for the non-manual workers was not as clear cut because equal percentages spaced their children twenty-four months or more apart. However, if this category is ignored, the relationship was seen. Whereas 14 percent of the women whose husbands had non-manual occupations and who had high child-quality standards began trying for their second child within nine months of their first, this was true of 43 percent of those who had low child-quality standards. It seemed that those women who felt many commodities were unimportant for their children tried to have their second child more closely spaced to their first than those who felt that it was important to give their children such things as separate bedrooms and new clothes and toys. The more apt a woman in either social class was to hold high child-quality standards, the more apt she was to wait before trying for a second child. The importance couples placed on material goods for their children seemed to have an impact on how they

spaced those children. This was an important theme in the reasons couples gave for spacing their children as they did and the reader is referred to the qualitative analysis in Part III for a fuller exploration of the topic.

In this section we have looked at the impact of income and prices on the timing and spacing of our couples' two children. Present income showed a relationship to timing of the first child, particularly amongst the pre-maritally pregnant. Those women who had their two children closely spaced after marriage were at the lower end of the income scale and, judging by their occupations, would appear destined to stay there. The relationship with income for those planning their children was less clear cut though and seemed to stem partly from the association between income and social class. Direct costs, that is the child-quality standards parents held for their children, helped explain why couples in both social classes spaced their second child as they did. Couples who held high child-quality standards tended to space their second child further from their first than couples with low child-quality standards. In the next section, taste factors and their influence on the timing of the couples' two children will be considered.

5.3 Taste Variables

As we pointed out in the previous chapter, the variety and scope of possible taste factors influencing

family formation behavior is extensive. Here, as there, we will limit our discussion to three constellations which have received some examination in the literature and which we found to be useful in our qualitative understanding of our couples' behavior. The three are the conjugal relationship, sex role norms and behavior and antipathy towards children.

Our measurement of the conjugal relationship -- which the reader may recall was divided into the four components task performance, decision making, leisure activities and communication and understanding -- suffers from the same problem that the income variables did in accounting for the couples' timing and spacing behavior; the measures are measures of the couples' conjugal relationship <u>now</u>, and although they may provide a description of the effects spacing has on a relationship, cannot be used to comment on which sorts of people have their families quickly and which sorts delay. That is, because we could not determine the type of conjugal relationship our couples had before each of their children, and we cannot assume that a couple's relationship remains unchanged throughout their marriage (particularly with the advent of children), we cannot conclude how, or even if, a couple's conjugal relationship influences how they space their children. We can, however, use the information to see if there are any regularities between spacing of children and how couples perform tasks, make decisions, spend their leisure and communicate with one another.

Because we were interested in the patterns of relationship between the spacing of the couple's two children and their conjugal relationship, we decided to work with actual spacing categories. These were the spacing categories referred to in Chapter Three of the thesis; to repeat, less than nine months, nine months to two years, two years to three years, three years to four years and over four years with regard to the time period from marriage to the first child and less than eighteen months, eighteen months to two years, two years to two and a half years, two and a half years to three years and over three years with regard to the time period from the birth of the first child to the birth of the second.

Task performance and decision making were the first conjugal relationship variables we looked at and they showed little or no relationship to the timing of either of the children. Similar breakdowns of percentages were apparent within each of the spacing intervals. We had expected at the very least that women who had had their two children closely spaced would have had more help from their husbands with household tasks (simply because caring for two small babies is in itself a time-consuming task), but even this was not evident. Although the tendency was apparent, it was not strong -- household tasks were shared by approximately 27 percent of couples whose two children were born within eighteen months of one another and by approximately 24 percent of the rest. The conclusion from our data would have to be that spacing of children is not a factor in determining who makes the

decisions and who does the chores.

In the previous chapter when we looked at how couples spent their leisure time, we pointed out that the nature of the couples' leisure activities influenced their intentions regarding a third child. In those couples where the husband had outside interests but the wife did not, the wife was most likely to feel "tied down" and less likely to want a third child. Wives who had their own organized social life apart from their family responsibilities were, on the other hand, least likely to feel "tied down" and most likely to be considering further children.

It is possible that an intervening variable here is the timing and spacing of the two children. Women whose children came quickly after marriage or closely spaced together may feel more "tied down" or may be less able to pursue interests on their own. We looked at the relationship between the spacing of the children and the nature of a couple's leisure activities to see if there was any validity to this suggestion and there appeared not to be. Women who began childbearing quickly after marriage were no more apt than the others to display unique leisure patterns. Even timing between the children did not influence the nature of a couple's leisure activities -- more or less similar percentages of couples socialized as a unit only, had separate interests, or one or the other of them had separate interests in each of the spacing categories. It seems that the nature of

a couple's leisure activities cannot be accounted for solely by spacing considerations. Women who want, or have the interpersonal skills to enable them to have outside interests do so regardless of how their children are spaced.

The communication and understanding between a couple likewise could not be accounted for by spacing considerations. How they spaced their children showed no characteristic relationship with the nature of a couple's relationship. This was true even when we introduced social class into the analysis. The manual occupational classes generally were less happy with their conjugal relationships[13], but there appeared to be little association within either class between how well a couple got on and when they had had their two children.

As we said in the previous chapter, most women assessed their relationship with their husbands as being "very good" and thus our results must be interpreted with care. Also, it has been suggested that the well-known inverse association between age at first marriage and probability of divorce (Monahan, 1953; Jacobson, 1959; Burchinal and Chancellor, 1963; Park and Glick, 1967; Carter and Glick, 1970; Glick and Norton, 1971; Bumpass and Sweet, 1972; Weed, 1974 and Schoen, 1975) is because most young couples have their first child immediately after their marriage and this puts a strain on their relationship:

> When marriage begins with an extended period of childlessness, the wife will continue in employment,

> and the marriage is likely to be marked by relative egalitarianism and sharing. But such an experience is comparatively unlikely among the youngest couples who rapidly enter parenthood. . . The birth of a child makes egalitarianism much more difficult to attain. . . They have a very short time to get to know one another. . . (and) . . . they have very little experience of life on which to build.
>
> Ineichen, 1976: 64

Our data would not support this hypothesis; while working class couples did show higher levels of marital stress, this was regardless of when they had had their first child. However, as we have said, our cell sizes were small and hence the results must be considered with caution.

The second constellation of taste variables was sex role norms and behavior. Included here was the wife's work behavior and her attitudes towards traditional and modern role behaviors. We began the analysis by looking at the final control variable -- the wife's education.

The effect the wife's education has on the timing and spacing of a couple's family has been almost completely ignored in the literature -- neither Askham (1975), nor Cartwright (1976) nor Balakrishnan, Kantner and Allingham (1975) looked specifically at the influence of the mother's education on child spacing. Cartwright did suggest a strong monotonic relationship between social class and mother's education and Askham commented (1975: 134) that women in social class III with two children were more likely than average to have some further education, and hence, to this extent, we would predict women

with higher levels of education[14] to delay their first child longer than the others. A high rate of prenuptial conceptions was also observed in these studies amongst the unskilled and we would expect this to be reflected in a high rate of premarital pregnancies amongst those with less education.

All of these trends were found in our data. The premaritally pregnant were concentrated amongst the women with a grade twelve or less than a grade twelve education. Approximately 40 percent of the prenuptially pregnant had less than a grade twelve education, 30 percent had a grade twelve education, 22 percent had a short training course and 9 percent had a trade. No woman whose first child had been premaritally conceived had attended university. There was also evidence that amongst those planning their families, women with less education began trying earlier for a child than the others. Table 5.9 presents the results.

Table 5.9 Wife's Education by Months Between Marriage and Time Couple First Began Trying for a Child

	Wife's Education				
Timing to First	Less Than Grade 12	Grade 12	Short Course	Trade Course	University
6 months or less	71 %	16 %	10 %	11 %	10 %
6 - 18 months	14	32	35	33	40
18 - 30 months	14	28	30	22	30
Over 30 months	0	24	25	33	20
Total N	7	25	20	9	10

Just over 70 percent of the women with less than a grade twelve education began trying for their first child within the first six months of their marriage. To emphasis, none of these women were pregnant when they married; they all had discontinued, or never began, the use of contraception because they wanted to start their families. Only about 10 percent in the other educational categories began their families this quickly. Conversely, while none of the women with less than a grade twelve education delayed starting their families thirty months or more, approximately one quarter in each of the other educational groups did. It seems quite clear that not completing secondary school has an important influence on the timing to the first child.

Why education should have such an influence on timing to the first child appears, in this case, to stem from the effect it has on widening a woman's horizons beyond marriage and a family. When we examined the interviews it appeared that those women who had little or no interest in further education were more positively oriented towards marriage and child rearing than the rest. Their goals in life were more apt to center around having children and providing a home for them. Leaving school before grade twelve also severely limited the type of employment that was available to them to the more monotonous, low-paying jobs. Since raising a family was held in such high esteem, and any employment that might have been found was likely to be unsatisfactory, it is perhaps not surprising that these women started

trying for a family more or less immediately after their marriages[15].

Looking more directly at the influence the women's work behavior had on how they spaced their children[16], we found that while most of the women worked before their first child was born, those women who began trying for a child within six months of their marriage were less likely to do so. Table 5.10 presents the results.

Table 5.10 Work Behavior Before First Child by Months Between Marriage and Time Couple First Began Trying for a Child

	Work Behavior Before First Child	
Timing to First	Did Not Work Before First	Worked Full-Time Before First
6 months or less	62 %	12 %
6 - 18 months	38	30
18 - 30 months	0	30
Over 30 months	0	27
Total N *	8	59

* Four women worked part-time only before their first child and are not included in this table.

The women who did not work after they married were more likely to begin trying for their families within the early months of their marriage -- 62 percent of them began trying for their first child within six months of their marriage versus 12 percent of the women working full-time. The obvious explanation is that those women who wanted children immediately did not have time to work; they were quickly tied up with caring for children.

This is, however, only a partially satisfactory explanation. Of the women working full-time, most worked up to the sixth or seventh month of their pregnancy and hence, even if a woman did conceive a child immediately after her marriage, there would have been at least five or six months when she could have worked. Proof of this point is the fact that 83 percent of the premaritally pregnant women worked before they had their first child. Moreover, our women did not all conceive without delay; trying for two or three months was more common and at least two of the women were trying for closer to a year. Our point is that most of these women would have had time to work if they had chosen to -- the fact is they chose not to work once they married. A truer explanation for their behavior -- and an explanation which is expanded upon in Part III -- is similar to the explanation we outlined above. The women with a grade twelve or less than a grade twelve education tended to be the women who did not work after marriage (75 percent of those who did not work after marriage had a grade twelve education or less). They all were very positively oriented towards having children and none would have found it easy to have found employment that was rewarding in either an emotional or financial sense. The primary orientation of these women was "setting up a home" and "having children" -- an orientation which included no great desire for further education and a reluctance to work once married.

The one other work behavior variable we looked at was future work intentions. This variable showed no relationship to the timing of the first child, but it was related to the timing of the second child in a way similar to the child-quality variable. Table 5.11 presents the results. There were three categories used to measure future work intentions: the woman never intends to work in the future or only when her children have left home, the woman intends to return to work when her children are in school and the woman intends to return to work when her children are still pre-schoolers.

Table 5.11 Future Work Intentions by Space Between First Child and When Couple Began Trying for Second

	Woman Intends Returning to Work When:		
Timing to Second	Children Leave Home	Children in School	Children are Pre-School Age
Under 9 months	25 %	24 %	18 %
10 - 14 months	0	32	33
15 - 23 months	33	27	26
Over 23 months	42	17	22
Total N *	12	41	27

* The total N equals 80 because ten women were unsure when they would be returning to work.

The relationship is not strong but does indicate that women who space their children widely apart are less apt to be contemplating an early return to the work force. For instance, 75 percent of the women who were planning to delay their return to work until their child-

ren had left home waited at least fifteen months before beginning to try to have their second child. This was the case with only 48 percent of the women who were planning to return to work with pre-schoolers. When we reviewed the questionnaires, it appeared that the women who were not intending to return to work when they had school age or pre-school age children felt much more strongly about the importance of being at home with children and having children fairly far apart so that each child could get its share of attention. Women intending to work when they had pre-schoolers, on the other hand, were less worried about giving each child a great deal of attention -- to the point at times of commenting that their working was beneficial to the child because it stopped the child being "spoilt". This, along with the child-quality variable, provide the empirical basis to the qualitative analysis of child spacing and the reader is referred to Part III for the complete discussion. It appears that couples have varying opinions on how much time, attention and money should be spent on children and this influences their spacing and possibly total family size.

Sex role norms, as the reader may recall from the previous chapter, were measured through five scales which we collapsed into one role index. When we were looking at the relationship between when a woman began trying for her first child and her educational level, we suggested that the observed differences might stem from the effect education has on widening a woman's

horizons beyond marriage and a family. A similar argument was also used to explain why women who began trying for a child immediately after their marriage were less likely than average to attempt to find employment. What both of these explanations were basically suggesting is that women with "traditional" orientations (be it measured through a lack of desire to work once married or created by lower levels of education) are more apt to begin their families within six months of their marriage than women with more "modern" orientations. Since we did measure role orientation more directly we looked at the relationship between it and timing to when the couple began trying for their first child. Table 5.12 presents the results.

Table 5.12 Role Orientation by Months Between Marriage and Time Couple First Began Trying for a Child

	Role Orientation	
Timing to First	"Trad."	"Modern"
6 months or less	23 %	11 %
6 - 18 months	20	52
18 - 30 months	32	18
Over 30 months	25	18
Total N	44	27

There appeared to be only a slight relationship between role orientation and timing to when the couple first began trying for a child, although our hypothesis was supported in that a greater percent of those women with a "traditional" orientation than those with a "modern"

orientation were trying for their first child within six months of their marriage -- 23 percent compared to 11 percent. The two sex role categories showed quite different patterns of association -- the majority (52 percent) of the women with a modern orientation began trying for their first child when they had been married from six to eighteen months. The women with a more traditional orientation, on the other hand, were almost evenly spread between the four spacing categories.

It is difficult to know how to interpret these results. As we mentioned in the previous chapter, there did appear to be a tendency for women to select answers indicating a greater degree of role modernity than we would have expected. We have, however, no way of assessing this bias. Certainly from the qualitative analysis and from other measures in the quantitative analysis (i.e. educational level, work behavior), it appeared that those women whose orientation was towards their husband and children (i.e. they held a "traditional" orientation) began trying for their families sooner after marriage than those women whose orientation was more towards their own individualistic interests (i.e. they held a "modern" orientation).

The final taste variable we considered was antipathy towards children. This was a variable which indicated the extent to which children were seen as an encumbrance -- the extent to which they got on the mother's "nerves" or were a "burden". There was a relationship

between it and whether more children were wanted for the women whose husbands held a non-manual occupation, but the variable as measured was unable to pick up as much of the variation in attitudes towards children as we would have liked; most women expressed low levels of antipathy towards children. This was also a problem when we looked at the timing and spacing of the couples' two children. There appeared to be no relationship at all between antipathy towards children and either actual spacing categories or the spacing categories limited by when couples began trying for a child. Children were seen as an encumbrance by equal percentages of couples in each of the spacing categories. When we were conducting the interviews, it appeared that women who had had their children quickly after marriage and closely spaced were under greater pressure than the rest. This may simply be because we found it a greater strain to conduct the interview when there were two "babies" present, or these women may have been under a greater strain but without this affecting the extent to which children were seen as an encumbrance. Our original expectations, though, were not born out. Antipathy towards children, at least how we have measured it, showed no relationship to the timing and spacing of the couples' two children. Again we would suggest that this variable has been relatively ignored in the literature and, from our interview experience, would suggest that this be remedied.

In this last section on timing and spacing we have

looked at the relationship between a number of taste variables and the spacing of the couples' families. None of the conjugal relationship variables appeared to have been influenced by the timing and spacing of the couples' two children (or, conversely, the timing of the couples' two children did not appear to affect their conjugal relationship). Wife's education showed an interesting relationship with the timing of the first child -- women who had not completed a grade twelve education were significantly more likely to begin their families immediately after their marriages than those that had. This seemed to be a result of their greater orientation towards having children and their poorer prospects in the labour market. We also found that these women were less likely to work after their marriage. In general, women who did not work once they were married were more apt to begin trying for a family immediately. Future work intentions helped explain why couples spaced their second child as they did. Women who were not planning to return to work until their children had left home appeared to place a greater premium on the importance of spending time with children. This was reflected both by when they planned to return to work and in the spacing of their second child -- they were more likely than average to wait at least two years before even beginning to try for that child. This long spacing was so that sufficient time could be devoted to each child. Sex role orientation showed only a slight relationship with timing and spacing considerations; however, because

other behavioral indices had suggested a relationship and because we felt there was an inherent bias leading the women to select answers indicating a greater degree of role modernity than we would have imagined, we concluded that women with a "traditional" orientation were more apt to begin their families quickly after their marriage than women with more "modern" orientations. A traditional orientation stressed the children's needs before the mother's and seemed to be related to beginning a family as quickly as possible. The last variable we considered was antipathy towards children and this variable, at least how we measured it, showed no relationship with the timing and spacing of the couples' two children.

5.4 Summary

In this second quantitative chapter of the thesis we have looked at the timing and spacing of our couples' two children. In contrast to completed fertility, this topic has received relatively little attention in the literature. However, with our commitment to a dynamic model of fertility decision making with its emphasis on the situational nature of family formation, we felt it essential to consider each birth interval individually. In light of our (limited) available resources we chose to consider couples with two children and thus had to be content with an analysis of the factors that couples said influenced their fertility behavior. Rather than using the traditional spacing categories (categories ended by actual births), we used categories limited by

when couples began "trying" for a child. The traditional spacing categories appeared to be uninfluenced by a wide range of variables and, from the qualitative analysis, we were suspicious about this lack of results.

With regard to timing to the first child, we found a basic social class difference which was reflected in both income and taste variables. As a general rule, women from the working classes began their families sooner after their marriages than women from the middle classes. The reason why this was so appeared to stem from the differing conceptions the two social groupings had of marriage and child rearing. This is the primary thrust of the first chapter of Section III and the reader is referred there for a complete discussion.

Timing to the second child, in contrast, did not appear explainable by reference to social class differences. In fact, the two factors (one price, the other taste) which did distinguish women who wanted their children close together from women who wanted them further apart both involved differing conceptions of how much time, attention and material goods should be lavished on children, and neither were related to social class. Women who felt children should be invested with many goods tended to have their children further apart than women who felt that these things were unimportant. This is another main theme in Section III and the reader is referred there for the complete discussion. Before beginning the qualitative analysis, however, we shall

finish the quantitative analysis by considering the couples' perceived fecundability and their use, and misuse, of contraception. These were, the reader may recall, the other two factors through which we conceptualized fertility behavior as working.

CHAPTER SIX POTENTIAL OUTPUT OF CHILDREN

The theoretical framework used throughout this thesis sees fertility behavior as a function of the demand for children, the perceived potential output of children and the costs of fertility control. In the last two chapters we looked at the demand for children -- we considered how income, price and taste factors influenced the timing of the couple's present two children and the probability of their having a third child. In the following chapter we will consider our couples' experiences with birth control. In this chapter, though, we shall consider the perceived output of children -- how our couples' behavior is influenced by the number of children they feel they would have if fertility was not deliberately limited.

The determinants of fertility have been listed and described by Davis and Blake (1956). There are factors affecting exposure to intercourse, factors affecting exposure to conception and factors affecting gestation and successful parturition. The factors we felt were relevant to our couples' assessment of their natural fertility levels included coital frequency, fecundity or sub-fecundity as affected by voluntary and involuntary causes, and foetal mortality from voluntary and involuntary causes. We will consider the influence of each in turn.

Coital frequency was not a topic this study was able to handle very satisfactorily. The women were interviewed six to eight weeks after the birth of a child and many

had yet to resume marital relations. Those that had, had just and found it difficult to answer questions asking for an "average". We chose to interview the women so close to the birth of their child because we felt interest would be high in both demand and contraceptive factors. This was certainly true, but unfortunately at the expense of information on the long-term rate of marital sexual relations. All the women but one were living with their husbands, though, and in their discussions of the factors leading up to the births of their first and second children, none suggested coital frequency (including voluntary or involuntary abstinence) as a possible explanatory variable. Moreover, virtually all the women felt that unless steps were taken there would be further pregnancies, and thus we assumed that though rates of coital frequency undoubtedly varied between the couples, all were sufficiently high for the sake of conception[1].

Past foetal mortality from involuntary causes was accurately assessed in that the information was on the woman's medical record, to which we had access. There were thirteen miscarriages of a pregnancy leading to the first child and three miscarriages of a pregnancy leading to a second child. All the miscarriages of a first born were at approximately three months or less. One of the miscarriages of a second child was at six months (the baby was live-born, but died two hours later) and the remainder were at three months or less. There seemed to be no pattern to the women suffering miscarriages -- all

social classes were represented, as were all age groups. More to the point, no woman suggested that her future potential fertility might be hindered by foetal mortality from involuntary causes.

Past foetal mortality from voluntary causes (i.e. abortion) was more difficult to assess. Only one woman admitted to an abortion (her second pregnancy which came too quickly after her first), though there was one "miscarriage" which might have been deliberately prompted. We did not ask directly if the women had ever had an abortion, only if they had ever been pregnant without producing a live-born child. In this one case, the woman had been very young (seventeen) when she miscarried and seemed fairly reticent about discussing details[2]. The majority of women (84 percent) were opposed to the abortion of unwanted pregnancies <u>for themselves</u>[3] (Would you ever consider an abortion? "Never, I'd look at our two kids and I just couldn't, wouldn't ever do that."; "No, I would never hate it that much.") and thus we would predict that the rate of foetal mortality from voluntary causes had been, and would be in the future, quite low.

Measuring the extent of fecundity or sub-fecundity as affected by involuntary factors has plagued many researchers in the area of family planning. Askham, for instance, suggested (1975: 26) that for her sample "women's own opinions and a reliance upon their memory of sexual behavior and use or non-use of contraception meant that the question of the extent of sub-fecundity . . . was

extremely difficult to determine". Cartwright (1976) also relied on the woman's memory regarding fecundity ("Have you any reason to think that you and your husband could not have more children if you wanted to -- that you might have any difficulty becoming pregnant again -- or difficulty going on with a pregnancy until the baby was born?) as did Beaujot (1975) with the Edmonton sample. We too asked our sample women to assess their own level of fecundity:

> If you and your husband wanted more children, could you, from a medical point of view, have them? Do you think you could easily have another child or would it be difficult or impossible? If difficult or impossible, what makes you think this?

In addition, as Askham (1975) and Cartwright (1976) did, we looked at the length of time it took the women to conceive when no form of birth control was being practiced. As with the previous surveys, the majority of women took three months or less to conceive and so all those who took longer were considered as being possibly sub-fecund. This is, of course, not a perfect method of determining sub-fecundity due to involuntary factors but, under the circumstances, was the best available to us. Table 6.1 shows the time taken to become pregnant for each pregnancy for all mothers.

Table 6.1 Time Taken to Conceive

	Length of Time Having Unprotected Intercourse Before:			
	First Preg.	Second Preg.	Third Preg.	Fourth Preg.
Not At All (Taking Precautions)	15 %	14 %	14 %	0 %
Three Months or Less	54	57	57	100 %
Four Months - One Year	22	22	21	0
Over One Year	9	7	7	0
Total N*	100	103	14	1

* Information on how long it had taken to conceive could not be obtained from five women in connection with the first pregnancy, two women in connection with the second pregnancy and three women in connection with third pregnancy.

There is a tendency in the literature to assume that fecundity or sub-fecundity is an attribute that women have or do not have. Askham (1975), for instance, decided to classify seventeen of her women as sub-fecund after "a careful study of the pregnancy and birth-control measures". She does not mention, however, how women who had troubles conceiving some of their children but not others were classified, or how women whose sub-fecundity had been medically remedied were treated.

In our sample only fifty-four couples had not experienced some degree of sub-fecundity. It had taken them less than three months to conceive both of their children and they all felt they could (and would) have further

children unless steps were taken[4]. Conversely, there were twelve couples who had experienced sub-fecundity with both of their children[5]. It had taken them longer than three months to conceive each child and all realized that this was "longer than average". At least two had taken fertility drugs to prompt a pregnancy and most had asked the doctor about their problems with sub-fertility. None felt, though, that their sub-fecundity would totally prevent them having a third child if they should so choose -- the fact they had conceived at least two children meant to most of them that further conceptions were not totally impossible.

The remaining thirty-nine women had difficulties conceiving only one of their pregnancies. There were twenty-three women who took longer than three months to conceive their first child (but had no problems with the second) and sixteen women who took longer than three months to conceive their second child (and, conversely, had no troubles with the first). Some of these "mysteries" were easily explained -- there were three women who had been trying to get pregnant for three or four months before consulting a doctor. The doctor found they needed some relatively common operation such as a "D and C" after which they rapidly became pregnant. There were also four women who had had a miscarriage and the following conception took slightly longer than average. All of these women felt they could easily become pregnant again if they wanted to.

The rest of the women, though, who had had difficulties conceiving only one of their pregnancies had no real explanation of why that conception had been so difficult. The doctor had suggested "stress" or "trying too hard" to a few, some (eighteen percent, 6/33) felt the pill was involved ("The pill really mixed up my system. It took me a year to get back to normal."; "The pill just stayed in my system a long time."), but most were puzzled by their sub-fecundity. Most were, however, quite sure they could conceive a third child if they chose to. This was particularly true for those couples who, having had trouble conceiving their first child, failed to use contraceptives as long after its birth as they would have otherwise, thinking it would again take them a while to become pregnant. This was not to be the case, though, and all had their second child spaced closer than they would have liked.

> (Four years to conceive first child, one month to conceive second.) I went off the pill early because I didn't think she'd catch so fast. I was sort of hoping it might take as long as the first one, but it didn't.
>
> (Fifteen months to conceive first child, one month to conceive second.) It took me over a year to get pregnant with the first. And I figured, if it takes a year to get pregnant, then I'd better start trying. And then bang. I was pregnant again.

The couples most apt to mention potential problems with sub-fecundity from involuntary factors were those whose second pregnancies had been delayed because of sub-fecundity. There were six couples, in fact, whose marriage had been prompted by the consequences of only a few

instances of unprotected intercourse who then found themselves unable to have the further children they both wanted and were planning.

> (One month to conceive first, eight months to conceive second.) With her (first child), it was that one time. With him (second child), I couldn't believe it, but I couldn't get pregnant. Me! It's maddening when you can't have them when you want them.
>
> (Three months to conceive first, one year for second.) I sure had no trouble with the first one. But, and I don't know what it was, I couldn't get pregnant with him. I couldn't figure it out.

These couples were less sure about future pregnancies but, as with the women who had had trouble with both of their children, the fact they <u>had</u> conceived was proof enough that unprotected intercourse would, sooner or later, result in pregnancy.

The final factor we considered relevant to our couples' assessments of their potential fertility was infecundity due to voluntary factors (i.e. sterilization). This was easier to determine. Thirteen women had had a tubal ligation after the birth of their second child and five men had had a vasectomy by the time of the interview which meant seventeen percent of the sample were voluntarily infecund. Sixteen couples were also planning some form of sterilization (vasectomy or tubal) within a year -- their doctors had advised them to wait six months to a year after the birth of the second child before being sterilized just in case something should happen to that child and this was their intention. Including them in the calculation brings to thirty-two the percent voluntarily

infecund. This would seem to be the route most couples were considering in regards to their future fertility -- close to three-quarters of all couples thought it very likely that either one or the other of them would be sterilized by the time the woman was thirty-five. We will look more closely at this phenomenon in the following chapter on birth control, but we will conclude this chapter by suggesting that infecundity due to voluntary factors (i.e. sterilization) is the most important factor in regards to the perceived potential output of children. There was no indication that coital frequency was an important influence on fertility; only seven percent of all pregnancies were "wasted", most from involuntary causes; and many more couples were worried about "too many" children than about "too few". Infecundity due to voluntary factors appeared to have the greatest influence on how our couples assessed their fertility levels. This is, as we mentioned, a contraceptive issue and is discussed in the following chapter.

CHAPTER SEVEN COSTS OF FERTILITY CONTROL

7.1 Knowledge and Use of Contraception

In the preceding chapter we considered the perceived output of children -- that is, the number of children couples think they would have if they did not deliberately control their fertility. We found that for most couples, the perceived output of children exceeded their demand. Though we were unable accurately to assess rates of coital frequency, there was no indication that this was working as a sufficient check on natural fertility. This was also the case with foetal mortality from voluntary and involuntary causes and sub-fecundity due to involuntary factors. The only potential permanent check on natural fertility that most couples saw was voluntary infecundity (i.e. sterilization). Seventeen percent of the sample had already been sterilized and close to seventy-five percent were planning, at some stage in their reproductive life, to undertake such a step. Sterilization is, of course, the ultimate birth control technique and in this chapter we shall consider it as well as its less dramatic counterparts.

All of our respondents understood the concept of birth control and all but one (99 percent) had used a method at some time during their marriage. Such a high rate of contraceptive use is increasingly common in fertility surveys of developed countries. In Canada, the Edmonton-based Growth of Alberta Families study (Krishnan and

Krotki, 1976) asked questions on contraception but unfortunately did not provide information on the number of women who had ever used some technique. In Britain, Askham found (1975: 68) that all but one of her ninety Scottish couples had used, at one time or another, some form of contraception and Cartwright's English sample showed (1976: 45) a usage rate of 97 percent. In the United States, the most recent published fertility report is the 1970 National Fertility Study (Westoff and Ryder, 1977). This cross-sectional survey of ever-married women aged between eighteen and forty-four found that 15 percent of the women had never used contraception. The category "never used contraception", though, included many diverse groups such as the sub-fecund or recently married and Westoff and Ryder concluded (1977: 16) from their knowledge of these groups that "in 1970, the fraction who were at risk of unintentional pregnancy but who had never used contraception because of social or motivational reasons (was) clearly only a very small one indeed".

Although the majority of couples do practise birth control sooner or later, the exact stage of its introduction does vary. Askham, for instance, found (1975: 69) that skilled manual workers with two children were most likely to begin using contraception early in the family-building process (86 percent had practised some form of contraception after the first delivery) and that the semi- and unskilled manual workers with four or more children were the most likely to delay its use (only 35 percent had practised

contraception before the first or the second delivery). The 1970 National Fertility Study (NFS) considered only the proportion of women who used contraception before the first pregnancy and found (Westoff and Ryder, 1977: 55 - 56) that this proportion has been increasing significantly for recent birth cohorts. For women born between 1946 and 1950 and married when they were between twenty and twenty-four, 64 percent had used contraception before their first pregnancy. For similar women born between 1936 and 1940, only 39 percent had used contraception before their first pregnancy. We considered the time by which some form of contraception had been practised in our sample and Table 7.1 presents the results.

Table 7.1 Time by Which Some Form of Contraception Has Been Practised by Social Class

	Occupational Categories				
	All	Prof.- Man.	Other Non-Manual	Skilled Manual	Unskilled Manual
Before 1st Child	80 %	96 %	88 %	71 %	72 %
After 1st Child	97	96	100	94	100
After 2nd Child	99	96	100	100	100
Not At All	1	4	0	0	0
Total N*	102	25	17	35	25

* Information on when some form of contraception had first been practised could not be obtained from three women. All of these women were using contraception at the moment, however.

A very high percent of our sample couples had practised some form of contraception before the first delivery, even when the specific occupational categories were con-

sidered. All of the professional couples but one had used contraception before their first child whilst 71 percent of the skilled manual workers and 72 percent of the semi- and unskilled manual workers had used birth control at this stage. These two manual social classes may have been slightly slower to introduce the use of contraception but by six weeks after the birth of the second child all had begun its use. These usage figures are somewhat higher than the results of other studies[1], and we can only suggest that this might be related to the timing of our survey (evidence suggests that the use of birth control is increasing[2]) and to our exclusion of the sterile (cross-sectional surveys include all women -- fertile and infertile). Part of the explanation might also lie with the medical profession in Edmonton. Our contraceptive data, as will become evident, are quite different from that reported in the older American studies and the more recent British studies. As we did not have another Canadian source to compare our results with (the Growth of Alberta Families (GAF) study did not analyse their contraceptive data in ways useful to us and, moreover, had a nonresponse rate of over 30 percent, and the Toronto Study (Balakrishnan, Kantner and Allingham, 1975) was conducted in early 1968), we approached the chairman of the Royal Alexandra's Review Board and asked him if he thought our figures were representative or not. From his experience, he thought they were. He suggested that in Edmonton today the topic of contraception would be introduced and discussed by the doctor in most routine medical check-ups of young

people. Certainly after the birth of a child, the doctor would inquire about the methods of contraception his patient was planning to use. Most of our sample took the use of contraception (and the role of the medical profession in providing it) for granted, but the comments of this one woman show the extent to which medical intervention, in Edmonton at least, could contribute to the high rate of contraceptive use.

> This respondent did not use contraception before the birth of her first child. She used the pill between her children, but says she will not go back on it. She is unsure about future contraceptive use.
>
> > (Will you go back on the pills?) No. I didn't want to take them in the first place, but a lot of people pushed me, pushed me, pushed me. And stupid me, not thinking, I said I'd go on it. (You say "a lot of people?) Yea, the doctor, then my husband, his mother.

In the course of the interview we asked the women about the methods of contraception they had used before the birth of their first child, between the births of their two children, the contraceptive techniques they were using now and the methods they intended to use in the future. Table 7.2 presents the contraceptive techniques used by the couples at some time since their marriage. The percentages add to more than 100 as more than one method of contraception was commonly used by a couple as they passed through the stages of family formation.

Table 7.2 Methods of Contraception Used at Some Time Since Marriage by Social Class

	All	Occupational Categories: Prof.-Man.	Other Non-Manual	Skilled Manual	Unskilled Manual
Withdrawal	5 %	0 %	6 %	5 %	8 %
Safe Period	8	8	6	11	4
Chemicals Alone	13	20	24	8	8
Diaphragm	8	12	18	3	0
Sheath	25	36	24	27	12
IUD	18	24	6	14	12
Pill	91	92	76	94	92
Sterilization	17	12	24	16	19
Total N	105	25	17	37	26

The most common method of contraception used is undoubtedly the birth control pill. Just over 90 percent of all the women we interviewed had used the pill at some time or another. The next most popular method is the sheath, though only 25 percent of the sample would claim to have ever used it.

These results are quite different from those of previous surveys. Askham, for instance, reported (1975: 71) that approximately 50 percent of her Scottish sample had ever used the pill (and only 29 percent of those in social class V with four or more children) and approximately 48 percent had used condoms. Cartwright reported (1976: 52) that approximately 65 percent of her English sample had ever used the pill and 69 percent had ever used condoms. There has traditionally, though, been a difference in British

and American patterns of birth control techniques[3]. In contrast to American patterns, male methods (i.e. withdrawal and the condom) are very popular in Britain. We had no recent Canadian data to compare our results with (the GAF data, to repeat, were not analysed in detail and the Toronto Study was conducted in early 1968) and the 1970 NFS did not provide information on "ever-used" methods of contraception. The NFS found (Westoff and Ryder, 1977: 21), though, that in 1970 the oral contraceptive pill was clearly the most popular method of contraception with married women of reproductive age. These studies sampled a much wider range of women than we did (i.e. women of all parities) and it may be that our high usage rate of oral contraceptives is linked to our limiting ourselves to women of parity two. Cartwright suggests (1976: 61) that "people who started using contraception after the pill was available may well be prepared to accept it more readily than those for whom it was an innovation introduced only after they had started to use another method". Most of our sample certainly began contraceptive use after the pill was available[4]. In addition, our feeling was that unless a woman had strong objections otherwise, the birth control pill was the first contraceptive technique the doctor would suggest. Many women discontinued its use as side effects (or the worry about side effects) developed but it was the method most doctors initially prescribed. In a study of contraceptive risk-takers in the United States, Luker made (1975: 126) a similar observation. She suggested that "because of their (referring to the contraceptive

pill and IUD) improved statistical effectiveness, doctors were reluctant to prescribe or approve of the methods that subsequently began to be known as the "less effective" methods". It seems that because the birth control pill is so effective, many doctors (at least amongst those with patients in our sample and Luker's) are increasingly "single-minded" about prescribing it.

Table 7.3 presents the "main" method of contraception used by a couple during the four family formation stages that we are concerned with here. The methods of contraception have been collapsed into five groups on the basis of their popularity and their degree of reliability in preventing conception[5]. In the first category are the "natural" methods, i.e. rhythm and withdrawal; in the second are the appliances, i.e. diaphragm, condom and chemicals; in the third the interuterine device (IUD); in the fourth the birth control pill and in the fifth sterilization. By "main" we mean the contraceptive technique that was used for the longest period of time in each of the four stages. For instance, many women would temporarily use either a male or female appliance (say whilst they were breast feeding their child or taking a suggested "break" from the pill) but would rely primarily on a more effective method. We considered these second techniques as the "main" methods of birth control -- provided of course the woman used them longer than the more temporary measures [6].

The method of birth control used at the moment was problematic to code in that many women were temporarily using male or female appliances because they were either feeding their baby or waiting for a sterilization operation. If they (or their husbands) had an appointment set up for the sterilization operation or the insertion of the IUD, or if they had their prescription for the birth control pills (which was the majority of the couples), then we considered these second techniques as the "main" techniques. Otherwise we took the main method of contraception to be the method they were presently using. This could provide bias in two ways -- some couples, even though they had made arrangements for the use of another technique, may never have begun its use and, conversely, some couples could have switched to alternative techniques within weeks even though arrangements had yet to be begun. We could only hope that these two forces would in some way balance out.

We measured contraceptive use in the future by asking the women what method of contraception they thought they would be using when they were thirty-five. For the few women who were presently thirty-five or older, we asked about when they were forty or forty-five.

Table 7.3 Main Method of Contraception Used at Four Family Formation Stages

	Before First Child	Between Children	Now	In Future
Natural Methods	5 %	2 %	0 %	0 %
Appliances	13	18	13	0
IUD	0	7	22	6
Pill	61	62	45	8
Sterilization	0	0	19	85
No Method	21	11	1	1
Total N*	102	103	102	92

* Information on the main method of contraception used could not be obtained from three women in connection with the time period before the first child, two women in connection with the time period between the children, three women at the moment and thirteen women in connection with the future.

Birth Control Use Before the First Child

The most common method of birth control used before the first child was born was the birth control pill. Approximately 61 percent of our respondents used it as their main method of contraception. Second were the appliances (13 percent) and third were the natural methods (15 percent). Twenty-one percent of the women had used no method of contraception before their first child. They tended to have less than a grade twelve education (58 percent (11) of those with less than a grade twelve education had used no method of birth control before their first child) and to have been married when they were under twenty (41 percent (17) of the women who married when they

were under twenty used no contraception before their first). They also tended to have been premaritally pregnant -- 54 percent (13) of the women who had their first child within nine months of their marriage had never used contraception.

The pill users tended to have at least a grade twelve education (for instance, 69 percent (22) of the women with a grade twelve education used the birth control pill as their main method of contraception before their first child and 64 percent (7) of the women with a university degree did likewise) and to have been married when they were twenty or over (86 percent (25) of the women marrying when they were twenty or twenty-one used the birth control pill as did 66 percent (21) of those marrying when they were over twenty-one). Catholic women were slightly less likely to use the birth control pill than Protestant women and women with no religious affiliation but, even so, 53 percent (17) of them relied upon it (versus 65 percent (28) of the Protestants and 72 percent (13) of those with no religious affiliation). The Catholic women were more apt to use rhythm or withdrawal before their first child than the other religious groups, but still, only 12 percent (4) claimed this as their primary method of contraception. An equal percentage of Protestants and Catholics relied on appliances before their first child (16 percent (5) of Catholic women and 14 percent (6) of Protestant women). Appliances or the natural methods were not popular with women with no religious affiliation.

None of these women relied on rhythm or withdrawal before their first child and only one woman was using an appliance. These methods were also not popular with the six women with other religious affiliations. Half of these women had used the birth control pill and half had used nothing.

Birth Control Use Between the Children

Between the children, the pill was again the most popular method of contraception with approximately 62 percent of the sample relying upon it. The use of appliances increased to 18 percent and 7 percent of the women switched to the IUD. The use of the less reliable and natural methods and no method declined. In fact, if we exclude the relatively sub-fecund from the analysis, the number of women using no method of contraception between their children was only four. One of these four women was Mormon (a religion which opposes the use of contraception) and had never used birth control and never intended to. She was different from the other three women in that she had a university degree and her husband was a teacher. The other three women who used no contraception between their children had a grade twelve education or less and their husbands had unskilled (two manual and one non-manual) occupations. Catholicism did not seem to be the prime factor in their not using contraception as only one of the women was Catholic; the other two were Protestant. Three of the four women not using contraception between their children felt their second child was too closely spaced to their first and none of these women had "planned"

(that is, not used contraception because a child was wanted -- see discussion in the following section) the child. The one woman who did "plan" her second child felt it was spaced "just right".

Women using the pill as their main method of contraception between their two children were equally divided amongst the four occupational categories. They tended to have a grade twelve education or less or a short training course. Women with a university degree or trade training were less likely than average to use appliances. For instance, 65 percent (22) of the women with a grade twelve education relied upon the pill between their two children and only 12 percent (4) used appliances. Amongst women with a trade training, on the other hand, 46 percent (6) relied upon the pill and 38 percent (5) used appliances. This was also the case with the university educated women -- 45 percent (5) used the pill and 45 (5) percent used appliances.

Cartwright found (1976: 50 - 51) a social class variation in the contraceptive methods currently used by her sample couples. The wives of professional men were less likely than average to be using the birth control pill. More of these women than of the other mothers had taken the pill at some time, but more of them had given it up. She reported a study in Finland that found similar results and that argued:

> The use of the pill is no exception to the general rule that innovations are first adopted by the well-to-do and better educated strata, and spread gradually to other social groups. . . . It could be

> hypothesized that the upper strata . . . also have been the first ones to discontinue its use because of the widely publicised and discussed health hazards of oral contraceptives.
>
> Leppo et al., 1973-74

The better educated women in our sample may have been following this trend. When we looked at the methods of contraception they had ever used, we found that only 12 percent (3/24) had never tried the pill. The others had tried the contraceptive pill and, for one reason or another, had given it up. The most common reason cited for giving it up was the worry about side-effects.

> I started to read how awful it (the contraceptive pill) was for you and I just decided I'd been on it too long. And I started disbelieving my doctor who said it was all right. I realized it wasn't very good for you.

> I never really felt secure with (the pill). My young sister died of a brain tumor after two years of married life and we always kind of wondered if the pill brought that on.

Religion did not appear to have a great influence on the contraceptive technique used by our women between their two children. Amongst Protestant women, 63 percent (27) were using the pill and amongst Catholic women, 62 percent (21) were using the pill. There were only two women relying on withdrawal and rhythm, though, both of whom were Catholic. The highest percentage of women who used no contraception between their children were amongst those with other religious affiliations. Fifty percent of the six women in this category used no contraception between their children -- two were Mormon (a religion, as we have pointed out, which opposes the use of birth control) and one woman had taken four and a half years to conceive her

first child and hence felt no need for birth control. Women with no religious affiliation tended to use the contraceptive pill -- 65 percent (11) of them relied upon it. None of them used no method or the natural methods between their children -- the remaining six women were equally divided between the use of appliances and the use of an IUD.

Birth Control Use at the Moment

At the moment, the birth control pill was still the most popular method of contraception, though only 45 percent of our sample couples were using it. The percent using appliances had dropped to 13 (13), but the use of the IUD had increased to 22 percent. Nobody was using rhythm or withdrawal and just the one Mormon couple were using no contraceptive technique. The number of couples sterilized (or with appointments for this procedure set up) was twenty.

There were two Mormon couples within our sample and one of them began using the contraceptive pill when her second child was born. She had mixed feelings about contraception but had her two children within twenty-three months of one another and did not want to "try her luck" with regard to a third child. She felt her present two children were spaced too closely and though she wanted more children, she wanted at least three years between them. The other Mormon couple never intended to use contraception. They wanted "enough children to fill a (church) pew" and since the woman was thirty when she married, she felt "the change of life" would limit her family size to a manageable number.

When we were looking at contraceptive use between the children we found that the better educated women were less likely to have used the birth control pill. They were as likely as the others to have tried it, but more likely to have dismissed it. Cartwright had found (1976: 50 - 51) a similar trend in her data and accounted for it by a diffusion theory -- the well-educated are the first to accept innovations and the first to discontinue their use as hazards are publicised. The trend for the higher social classes and better educated women to move away from the use of the pill in our data is even more sharply seen in the women's present use of contraception. For instance, only 27 percent (3) of the women with a university degree were using the contraceptive pill at the moment compared to 55 percent (11) of the women with less than a grade twelve education and 48 percent (16) of the women with a grade twelve education. Moreover, only 32 percent (7) of the women whose husbands had professional or managerial positions used the pill versus 52 percent (16) of the women whose husbands had skilled manual jobs.

An alternative explanation to the diffusion theory is that the better educated women have moved away from the use of the contraceptive pill either because they are more apt to feel their families are complete (and hence more apt to turn to sterilization) or because they have more reason to worry about side-effects than the women with less education since they have been on the contraceptive pill longer[7] (the women with more education tended to be older

than those with less education[8] and hence could have been using the contraceptive pill longer).

With regard to the first possible alternative explanation we did find a slight inverse relationship between a woman's educational level and her proposed family size (see pages 157-158) -- the women with a university education were less likely than the women with less than a grade twelve education to be planning more children. The exception to this relationship, though, were the women with a trade. They, more than any other educational group, were planning additional children and they, as we have just seen, were as apt to reject the use of the contraceptive pill as the university educated women. If we look at the percentage of women (or their husbands) who have been sterilized, this first alternative explanation is given even less support. An equal percentage in each of the social classes had been sterilized -- 21 percent (5) of the professional class, 23 percent (4) of the other non-manual category, 17 percent (6) of the skilled manuals and 20 percent (5) of the unskilled manuals. Looking at wife's education, this first alternative hypothesis is again given little support. Whereas 27 percent (3) of the university educated women or their spouses and 15 percent (3) of those with less than a grade twelve education (or their spouses) had been sterilized, no woman with trade training (or their spouses) and 32 percent (8) of the women with a short course (or their spouses) had undertaken this step.

The second alternative hypothesis is more difficult for us to accept or reject as we did not ask about contraceptive use before marriage. Women with higher levels of education may have been slightly older than average at the birth of their second child (see footnote 8), but this is not to say they had necessarily been using contraceptives (and the birth control pill specifically) longer than the others. They tended to marry later (the relationship between wife's education and age at marriage is presented on page xii) and when we examined the interview schedules, there was no evidence that the better educated women had been using the birth control pill longer than the others. Certainly none of them mentioned that their doctors had refused them the contraceptive pill because of the length of time they had been on it. The diffusion theory, in fact, did seem to have some validity. Over 40 percent (11/25) of the women with a university education or trade training specifically mentioned giving up the birth control pill either because of its side-effects or the worry about side-effects. Just 25 percent (5/20) of the women with less than a grade twelve education expressed giving up the pill for these reasons. The quotes concerning the worry about the effects of the contraceptive pill given above were both from women with a university degree. Moreover, any expressed enthusiasm for the pill was in most cases from women with less than a grade twelve education.

> The pill has never bothered me, or hurt me in any way, and I've never gotten pregnant on the pill, so I'm going to stick with it.

> I'm staying on the pill. It doesn't bother me; I have no side-effects or anything. And my mom has always used it.

Whereas the percentage of couples using the contraceptive pill declined over the life-cycle course, the use of the IUD increased. Nobody was using an intrauterine device before their first child, 7 percent were using it between their children and 22 percent were using or planning to use it now. That nobody used an IUD before their first child was born is understandable in that it is a technique that is normally prescribed only to women who have had a child[9]. But why its use should increase from approximately 7 to 22 percent is less clear. There were no apparent social class or educational differences with regard to the use of the IUD (for instance, 20 percent (4) of the women with less than a grade twelve education were using an IUD compared to 27 percent (3) of the women with university and 18 percent (4) of the women whose husbands were in professional or managerial positions were using an IUD as were 19 percent (6) of the women whose husbands had skilled manual jobs) and our feeling was that its increase was in large part due to the negative publicity surrounding the birth control pill[10]. It is also, we should point out, a new technique for most of the women (17 of the 22) and some will find it unsuitable. Of the eleven women in our sample who had tried an IUD, five had given it up immediately because of side-effects and three had stayed with it until their second child was born although they neither "liked" the method nor were "happy" on it. The side-effects them-

selves seemed somewhat more severe than those associated with the birth control pill[11] and hence it may be premature to conclude that such a high percentage of the couples will actually be using an IUD for any length of time.

Future fertility intentions had the expected impact on the contraceptive technique our couples were using at the moment. Women who wanted more children were equally divided between using appliances (27 percent, 7), an IUD (35 percent, 9) and the birth control pill (35 percent, 9). Women who definitely did not want additional children were less likely to use appliances (9 percent, 5) or an IUD (13 percent, 7) and more likely to be using the very reliable birth control pill (42 percent, 23) or be sterilized (36 percent, 20). Women who were undecided about their future fertility tended to use the birth control pill (67 percent, 14). None were sterilized, 29 percent (6) had an IUD and 5 percent (1) relied on appliances.

Westoff and Ryder reported (1977: 18) that "one of the most dramatic findings in the 1970 National Fertility Study is the fact that voluntary sterilization -- at that time, typically, tubal ligation for women and vasectomy for men -- has become the most popular method of contraception currently used by older couples (in which the wife is aged 30 - 44)". In fact, Westoff and Ryder named (1977: 333) the published report of the 1970 NFS The Contraceptive Revolution because of the "extraordinary changes that have occurred in the control of fertility in (the United States) . . . (namely) the spread of the birth control pill and

sterilization for contraceptive reasons". Our sample certainly were following these trends. We have outlined the enormous popularity of the oral contraceptive pill and will now consider the movement towards sterilization.

Looking first at the women and men who are currently sterilized (and for this we have excluded the two couples who only have the appointments for the procedure set up) we found, to repeat, that thirteen women had a tubal ligation[12] after the birth of their second child and five men had a vasectomy by the time of our interview.

There appeared to be a social class variation in the type of sterilization procedure that our couples decided upon. Of the tubal ligations, six were to women in the skilled manual category, four were to women in the semi- and unskilled category and there was one each in the other two occupational categories. Of the vasectomies, on the other hand, there were two each in the professional/managerial category and the other non-manual category, none amongst the skilled manuals and one in the semi- and unskilled manual category. Moreover, two of the three women in the top two occupational categories who had had tubal ligations had also had caesarian sections, so that the sterilization operation was particularly easy to perform. None of the women in the manual social classes who had had tubal ligations had had a caesarian delivery.

The 1970 NFS found a similar trend (Bumpass and Presser, 1972: 540); whereas the relationship with wife's education was inverse for tubal ligations, it was direct for vasec-

tomies. Moreover, the mode of sterilization varied with income much as it did with education -- tubal ligations were more prevalent at the lower income levels and vasectomies were more prevalent at higher levels. Bumpass and Presser suggested (1972: 540) that the differences might arise through "education differences in the willingness of the husband to become sterilized, in misinformation about the physiological effects of vasectomy, and in medical access to the two types of sterilization". We unfortunately did not discuss in detail attitudes towards the two types of sterilization, but our impression from the comments that the women did make was that all three factors played a role. Women in the lower social classes (who normally had lower levels of education and income[13]) were more apt to report that their husbands were not amenable to a vasectomy.

> I tried to get my husband to go but he wasn't too receptive to the idea. I wouldn't go back on the pill for an indefinite number of years, so I thought the only solution was the tubal.

> It was always in my mind that once I'd had my second one, there'd be no way to have a third. Every once in a while I'd try to say to my husband -- it's a lot easier to get a vasectomy -- but there was no way he would, so.

The women in the higher social classes, on the other hand, were more apt to report that their <u>husbands</u> had decided that a vasectomy was the best method of sterilization.

> I wouldn't have brought it up, but he mentioned it. It was more his decision. It was the only one I didn't discuss with him because you know what men are like.

> I was going to go in and then he said no, he would go in instead because it's much easier for a man.

> He decided it was easier for him to have a vasectomy than for me to have a tubal.

Medical access also appeared to have influenced the incidence of tubal ligations. Medical approval for female sterilization when there are only two children present is granted in Canada only if the woman can come up with some pretty strong arguments. It seemed as if it were the women in the two manual social classes who most easily impressed us (and no doubt their doctors) with their "need". Women in the other social classes did not, by and large, have inadequate housing, low incomes, past contraceptive failures and mental stress to refer to.

The 1970 National Fertility Study found a direct relationship between the prevalence of sterilization and age and we also expected, for a number of reasons, this relationship to appear in our data. Older couples, we felt, might be more interested in sterilization because they might not want to risk another pregnancy[14] and because hospital and physician standards make it easier for the older mothers to gain medical permission. This was not as strongly borne out by our data as we had anticipated. The average age of all the women in the sample was 25.6 and the average age of all the men was 27.8. The average age of the sterilized women, in comparison, was 27.9 and the average age of the sterilized men was 27.0. The sterilized women were older than average (but only by two years and a few months) whereas the sterilized men were slightly younger than average. This would seem to stem partly from

our limiting the study to couples with two children. Our older couples, in many cases, were undecided about whether or not to have additional children and hence sterilization was premature for them. In other studies, where there is no limit on parity, the older respondents are more likely to have finished their childbearing and hence more likely to be candidates for a permanent form of birth control. We investigated the correlates of the relationship and the one variable that did clearly stand out as being related to the incidence of sterilization was the husband's income. Whereas 22 percent (6) of those couples earning between $12,000 and $15,000, 14 percent (5) of those earning between $15,000 and $20,000 and 14 percent (3) of those earning over $20,000 had been sterilized, 50 percent (5) of those earning under $12,000 had taken this step. Moreover, within this low income category were two students, neither of whom had been sterilized, who saw their low income as a temporary phenomenon. If they are excluded from analysis, then a striking 63 percent (5/8) of those couples with poverty-line incomes have turned to sterilization to limit their family size. Reading their interviews, it appears as if their low incomes (or, rather, the problems associated with inadequate incomes) were enough to have their doctors -- even taking into account their youth (three of the five women were twenty-one years of age) -- agree to some form of sterilization. This is, incidentally, in line with our previous observation that medical access has an influence on the incidence of sterilization.

The one other interesting finding had to do with religion and was also reported in the 1970 National Fertility Study (Westoff and Ryder, 1977: 151). Catholic women were slightly less likely than average to be sterilized (or their husbands to have been sterilized) -- 9 percent (3) of them would definitely not have further children with their present spouses versus 21 percent (9) of the Protestants, 17 percent (1) of those with other religions and 33 percent (6) of those with no religion.

Future Fertility Intentions

Looking finally at the couples' future fertility intentions, we found only the one Mormon couple who never intended to use contraception. As we mentioned before, they felt the "change of life" would provide sufficient fertility control. All of the other couples were intending to use either the reliable IUD or birth control pill or be sterilized. Nobody intended to rely on the less reliable methods in their later childbearing years. This finding seems universal in recent fertility studies[15]. As desired family size is reached, the more reliable methods are used; as Askham (1975: 71) explained it: "family-size limitation tends to be seen as a more essential concern than family-size spacing".

There were thirteen couples who were undecided at the moment about what to do in the future to control their fertility. Three of these couples had yet to think about their future contraceptive needs. All were planning larger

families and were more concerned about what to use now than at some time "in the distant future". The rest of these couples did not like the finality of sterilization, but then did not want to take the birth control pill indefinitely or risk a pregnancy with appliances or an IUD. They were very much "undecided".

> My husband is totally against (sterilization) so I don't think we'll ever do that . . . I think I would wait till I was over 30 or 35, then get it (tubal) done. But then you never know what might happen. You could lose your children or your husband. It's the easy way out, but . . . and yet, I don't want to stay on the pill too long either, so . . . Oh, I don't know what I'll do.

> I don't know (about a tubal ligation). You really don't know in the long run what's going to happen. I might have a tubal, but then I haven't tried that loop before, so it just depends on that. (Vasectomy?) Forget it. He's chicken.

The majority of the other couples were sure that sterilization was the method they would ultimately turn to -- 85 percent (78) of the decided were planning on some form of sterilization. The remaining 14 percent were almost equally divided between planning to use the birth control pill (7) and planning to use an IUD (6). These couples tended to have either religious objections to sterilization or really dislike its finality. They felt they would be able to "get by" without having to resort to sterilization.

> (Would you ever consider sterilization?) Never. There's so many things that could go wrong. There's a lot easier ways to stop having kids than having an operation.

> I don't think I'll ever have a tubal. Right now that's my opinion. For the simple good reason, who knows what's going to happen to your family life. You just may want more kids. I think I can find other ways. (What about a vasectomy?) Never.

The majority of our sample, though, thought they or their husbands would be sterilized by the time the woman was thirty-five. The most popular form of sterilization anticipated was for the female -- 48 percent (29/60) of the couples planning to be sterilized were planning a tubal ligation, 15 percent (9) were planning a vasectomy and 37 percent (22) were undecided, at the moment, between the two techniques.

The rise in the popularity of sterilization in Canada has been nothing short of spectacular. As a contraceptive technique, sterilization was virtually unheard of (and frowned upon) less than a decade ago[16]. Today, in contrast, its support is near unanimous -- approximately 75 percent of our sample[17], which from all other analyses has been representative of young childbearing couples, are sure that this is the method they will ultimately be using. A further fourteen percent are undecided about its possible use, leaving only eleven percent who are definitely opposed to it for themselves.

With regard to sterilization, the 1970 National Fertility Study (1977: 159) found that for whites in the United States there was an inverse relationship between parity and the serious consideration of male and female sterilization. Although there was no variation by parity within our sample, our couples showed similar tendencies. Those couples with large family aspirations tended to be more undecided or opposed to sterilization than those couples wanting only two children -- 30 percent (8) of the couples

wanting more children thought they would never be sterilized as opposed to none of the undecided and 6 percent of those definitely wanting only two children. Only one of these women with large family aspirations wanted to be having children until the end of her childbearing period, so simple "lack of need" was not the explanatory variable. For a small percentage of these women, religious beliefs were the accounting factor -- their religion both endorsed large families and rejected sterilization. The views of the rest, though, could not so easily be explained. Reading the interviews it appeared as if the women with large family aspirations were the least likely to like the finality of sterilization -- the thought that if they did change their minds or if something did happen to their present family, they could not have additional children. Large families were important to these women and sterilization was seen as a potential threat to this. These women were also, of course, in the midst of childbearing, whereas the others were more or less at its end. They could well change their minds when they reached their desired family size and were faced with years of potential excess fertility. As well, medical intervention could push some of these women towards a more permanent method of birth control. It was our impression from reading the interviews that sterilization was often suggested to women once they had reached their stated ideal family size. This kind of medical endorsement would for many of our women be a sufficient "push" towards sterilization.

(When did you first consider having a tubal ligation?) Well the doctor questioned me -- whether I was planning on going back on the pill after having the baby. This was when I was pregnant. He didn't think it was a very good idea me being on the pill for that many years and to keep on going if I wasn't planning on having more family. I would have waited but the doctor felt it was best to have it done then. He figured it was easier to have it done then, seeing as I'd had the two. I'd have waited, but I decided to take his advice.

The 1970 National Fertility Study found (1977: 160) American Protestants to be more interested in both male and female sterilization than American Catholics, although the Catholic receptivity to contraceptive sterilization was substantial. The Catholic/Protestant differentials in our sample were in the same direction, but were quite slight -- 12 percent (4) of the Catholic women thought they or their husbands would never be sterilized versus 5 percent (2) of the Protestant women and 6 percent (1) of the women with no religious affiliation. It was the two Mormon couples who were definitely opposed to contraceptive sterilization -- neither thought they would ever even "entertain the idea" of sterilization. The Catholic women and the women with no religious affiliation who were thinking of sterilization tended to be thinking of female sterilization -- 52 percent (12) and 73 percent (8) respectively thought they would be having a tubal ligation. Couples where the wife was Protestant, on the other hand, tended to be more undecided (50 percent, 12) at the present time between male or female sterilization. The percentage of men planning to have vasectomies was highest amongst the Protestant men (24 percent, 6/25) and lowest amongst

the men with no religious affiliation (none had definitely decided on a vasectomy). Catholic men were intermediate -- 13 percent (3/23) were planning to be sterilized.

Family income in the 1970 National Fertility Study (Westoff and Ryder, 1977: 160) was found to have no clear relationship for whites with the serious consideration of sterilization. Husband's income for our sample, likewise, did not separate those couples planning to be sterilized from those who were not. Social class, as well, did not show a relationship with future sterilization plans. More or less equal percentages in each occupational category thought they might eventually take this step -- 92 percent of the professional-managerials, 88 percent of the other non-manuals, 89 percent of the skilled manuals and 88 percent of the unskilled manual workers.

Female sterilization, as we have seen, is the most popular form of sterilization and this was particularly so for the semi- and unskilled social class and for those couples where the wife had less than a grade twelve education. Of those couples intending to be sterilized, 82 percent (9/11) within the semi- and unskilled occupational category were planning a tubal ligation. Less than 55 percent in the other occupational categories were this sure that it would be the woman who would be sterilized. No man with a semi- and unskilled job was definitely planning a vasectomy, whereas 22 percent (4) and 18 percent (4) of the professional and skilled manual occupational categories respectively were. A similar pattern was seen

with wife's education. Of the couples who were intending to be sterilized at some time in the future, 78 percent (7) of the women with less than a grade twelve education thought they would be the one. The corresponding percent for the women with a university education was only 28 percent (2) and all of the other educational groups ranged in between, but closer to the 28 percent.

We saw a similar trend in our earlier discussion of sterilization and we suggested, following Bumpass and Presser's (1972) argument, that differences in the incidence of male and female sterilizations might arise over medical access to the operations, lack of information (or wrong information) about the operations' side-effects and educational differences in the willingness of partners to undertake the procedures. These explanatory factors again seem satisfactory.

Medical access to operations in the future is difficult to determine and from discussions we have had with the medical profession we have found no bias towards one form of sterilization or the other. The comments of one woman did suggest though that some doctors might be persuading their patients.

> My husband would have had a vasectomy. We talked about it. But I talked it over with my doctor and he thought it better if I got my tubes tied. So I took his word and I'm going in within a month.

There was no other evidence of this, and her doctor may have been unique, but the influence of the medical profession should not be totally dismissed.

The influence of the other two factors was strongly borne out by the comments the women made about vasectomies and tubal ligations. Many of the women expressed doubts about the effects of vasectomies --

> I don't know that much about it, but I don't particularly like the idea of him having it done. You don't know what it can do to them.
>
> I don't know that many men that had it done. Whether it would affect them any or not.

but the better educated women and the couples in the higher social classes were more apt to mention the benefits of vasectomies --

> He'll have a vasectomy. Sterilization is too hard on women. It throws their hormone balance off and I guess a vasectomy is much easier. From what I've read.
>
> We're both willing. Maybe he's more willing than me because I think you have to go into a hospital to have a tubal and that means a babysitter and for him, he'd just have to go into the doctor's office and stay home a day.

The most common reason the women gave for having tubal ligations rather than their husbands having vasectomies was that if the household split up, either through divorce or death, the men would be the most apt to want further children.

> I think the woman, if she is definite she doesn't want any more children, she should have a tubal. I think the man . . . he should have the chance to have another child by the next wife. That's important to men.
>
> We thought if we ever, ever got divorced usually, 95 percent of the time, the women get the children. And I thought if he ever gets married to a woman who doesn't have any kids and they want children, they're stuck right there. And why should he be deprived. I've done my thing. I won't want any more kids regardless.

Thirteen women expressed this point of view and eleven of them were from the two manual social classes. The women from the higher social classes appeared to be less concerned about the possibility of their husbands wanting further children[18] and more apt to make comments along the lines of "either of us would -- it's the same thing in the end". In addition, the husbands in the higher social classes tended to be more favorable towards vasectomies. As we commented on before, they tended to decide themselves that a vasectomy was the easiest and best method of sterilization. Many of them suggested that it was their "turn" -- their wives had had the children and been responsible for contraception in the past and now they could contribute something to fertility control.

A final factor which might perpetuate the social class differences we observed in the method of sterilization planned was the influence of friends. The majority of women in all classes and with all levels of education were hesitant about vasectomies but, as we have seen, there were more women in the lower social classes and with less education having tubals and more men in the upper social classes having vasectomies. The influence this may have on future sterilization trends is seen in the following quotes:

> (From a couple in the professional/managerial occupational category) He's not too keen on a vasectomy, but there seems to be more and more men -- friends of ours, friends of his -- that this is the method they are using. And it seems to be agreeing with them. I would go ahead, but I think he might, maybe, change his mind, and that would be fine for me. Better, he could go instead.

(The woman has had a tubal and has a grade twelve education) I don't think we even considered a vasectomy, but then I don't know that many men that have it done. . . . The tubal seemed easier. I was in the hospital and we knew we only wanted two and it just seemed the thing to do.

The one other variable we looked at in regards to future sterilization was the present use of birth control. There was no clear pattern in the relationship between the two variables. Women who were intending to be sterilized were more likely to be presently using the birth control pill (46 percent, 13) and women who felt their husbands would be having a vasectomy were more likely to be presently using appliances (33 percent, 3). Women who were undecided between male or female sterilization tended to be presently using the birth control pill (64 percent, 14) as did those undecided about sterilization itself (71 percent, 10) and those opposed to it for themselves (60 percent, 6). If there was any pattern, it was for those women who felt that sooner or later they or their spouses would be sterilized to be using appliances to a greater extent than those women undecided or opposed to sterilization. In many of these cases, though, this was simply because a temporary measure was needed until arrangements could be made for the sterilization operation.

Throughout the thesis we have used Askham's 1970 Scottish survey (published in 1975) and Cartwright's 1973 English survey (published in 1976) as comparison groups for our data. In the section of this chapter where we have reviewed the contraceptive methods our couples have used throughout their marriage, we have failed to do this.

There were two primary reasons for not providing the comparison, the first of which is that contraception is an area where change is rapid -- new techniques and refinements of older techniques make even five or six years seem a long time. The 1970 National Fertility Study (the American survey published in 1977) documented "extraordinary changes in the control of fertility between 1965 and 1970" (Westoff and Ryder, 1977: 333) and from comparisons of their data with ours we can only conclude that these "extraordinary" changes have been continuing. The second reason for the lack of comparison is that there appear to be cross-cultural differences between Britain and Canada with regards to contraception that were not so readily apparent in the rest of the analysis. As we previously mentioned (see footnote 3), the British have traditionally relied upon male methods of contraception to a far greater extent than either Canadians or Americans. They seem also to be far less favourable towards sterilization. Cartwright asked (1976: 64) her couples if they would ever consider being sterilized and found that 47 percent of the mothers and 43 percent of the fathers said definitely no. This, to repeat, was a survey conducted in 1973 -- in 1970, in the United States, the National Fertility Study found (Westoff and Ryder, 1977: 103 - 104) between 50 and 60 percent of all their respondents favourable towards both male and female sterilization. Our study of 1977 suggests that in Canada this percentage has risen to 75 or 80. It is true that the majority of women in Askham's study who had four or more children had been sterilized[19], but this seemed

almost to have been pushed upon them when it became apparent they could not limit their fertility by other methods; Askham herself referred (1975: 88) to sterilizations as " "desparate" or "final" solutions to the problems of controlling family size". This certainly was not the case with our sample. The majority of women efficiently and effectively used contraception as they married and had their families and then turned to sterilization as the most reliable and safe technique in their later childbearing years. For these two reasons, the comparison with the British literature was omitted from this section of the thesis.

In conclusion, we have considered the birth control techniques our couples have used, are using and are planning to use at the various family formation stages in this chapter. We have seen the wide-spread knowledge, and use, of contraception amongst all social, religious and age groupings and we have commented on the wide-spread use of the oral contraceptive pill and the trend towards sterilization. We have not as yet, though, looked at the impact of contraception on the couples' family formation patterns -- the "effectiveness" with which the couples were able to use the techniques. In the following section we shall consider the timing and spacing of the couples' two children in light of their contraceptive knowledge and practice.

7.2 Effectiveness of Contraceptive Use

In the preceding section we looked at the methods of birth control our couples had used throughout their marriage and the methods they were intending to use in the future. We found that use of contraception usually began before the first child and in those cases where there was a delay, the delay was only until that first child was born. By the time of the second child all but one of our couples were using some method of birth control. The methods of contraception chosen were, in most cases, the statistically effective ones. Approximately 60 percent of the couples were using the birth control pill before their first and second child and, while the percent of contraceptive pill users had dropped to 45 percent at the moment, 19 percent of the sample had had a sterilizing operation. Just under a quarter of the sample had used no contraception before their first child was born and this had dropped to 11 percent by the time of the second child and 1 percent now.

Although the use of contraception was common and widespread, this reveals nothing about the "effectiveness" of its use. All methods of birth control but sterilization are open to abuse or failure and, in fact, amongst our sample couples, only 65 percent of first births and 70 percent of second births were "planned". In this section we will consider the effectiveness of contraceptive use in terms of the number of children desired.

To determine the effectiveness of birth control use we presented our couples with a list of methods of contraception (which included all the methods listed in the preceding section) and a list of "circumstances of becoming pregnant":

1. Before you and your husband ever started using a method.
2. While you were actually using some method and didn't want a pregnancy just then.
3. When you took a chance and didn't use a method.
4. After you deliberately stopped using a method in order to have a child.
5. Some other circumstance (please specify).

The women were asked which methods of contraception (if any) they had used before each pregnancy and the circumstances under which they became pregnant. In the actual interview situation, these two questions normally generated a great deal of discussion about all the methods of contraception that had been tried, and all the problems that had been encountered as well as why they had become pregnant when they had. The last set of questions in the interview asked explicitly why the couples had decided to have their children when they did (for those people who had decided) but it was at the previous point when most of the information we wanted was offered. The last set of questions was normally used for summary and clarification purposes.

In looking at the effectiveness of contraceptive use we found, as Askham (1975: 65) had before us, that it was not a dichotomous variable -- people were not either

effective or non-effective birth control users. Some women had effectively planned one child but not the other and others could not be even placed on the scale; they either had no idea how many children they wanted (i.e. It's God's choice how many and when) or they had had their ideal family not through the effective use of birth control but through "luck" (and, most likely, sub-fecundity). We thus divided our couples into three contraceptive effectiveness categories and considered each pregnancy interval separately.

In the first contraceptive effectiveness category were those couples who had "planned" their child -- they had either stopped using a birth control technique specifically to have a child or they had never begun the use of contraception because a child was wanted. Some couples who did not use contraception before their conceptions suggested that it was not because they wanted a child but because "they didn't care if one came along". These couples were not included in the first category -- by our definition, "planning" meant actively trying for a child. By this definition, 65 percent (66) of the first children were planned and 70 percent (73) of the second children were planned.

Leaving for a moment the second category, in the third category were included those couples who had definitely not planned their child. Either they had been using a birth control method which failed on them or they were taking a chance and not using contraception although a

baby was not wanted at that particular time. The key-point of this category was that at the time they became pregnant they did not want a baby. Using this definition, 24 percent (25) of the first births and 14 percent (15) of the second births were not planned.

The second, intermediate category was for those people who did not properly fit into the planning/not planning dichotomy. It included those people who had ceased using, or never used, contraception for reasons other than wanting a child (i.e. religious objections to contraception, difficulties in finding a suitable technique) and whose attitude to a pregnancy was "well, if it happens, it happens". This was quite a distinct category and included 12 percent (12) of first children and 16 percent (17) of second children. The couples in this category did not seem to want to take the responsibility of actually "planning" a child, but would take steps whereby a pregnancy was more or less inevitable with the attitude that if a baby was conceived "it didn't really matter", "if it happens, it happens". This category has only rarely been suggested in the literature[20] but, particularly in the early interviews when we tended to "press" people to choose either planned or unplanned, it was clear that it was distinct.

> (This couple was interviewed together. They had been using condoms before their first child but admitted to risk-taking behavior. When initially asked if their first child was planned the husband answered "no -- that was an accident". After discussing the timing of the child, the husband added:)

About Susan. We, how should we say this, we certainly wanted to have our child in that year, but a few months later would have helped us. (Was Susan planned or more an accident?) More an accident. I guess that's true, although in a way, maybe . . . maybe not. Because we were getting a little concerned that the time was going on and we really had to start making some decision about raising a family or else not have one at all. That really was one of our concerns. So, I suppose it was impromptu, but, on the other hand, it may not have been. One can look at it either way.

(This woman had been using the birth control pill but did not renew her prescription because she felt she had been on it long enough. The couple then used nothing although they did not want a child, ideally, for a year or two.)

(Was your first child planned?) I guess she was kind of an accident. She wasn't planned. There again, it didn't make any difference one way or another if I got pregnant. If we'd wanted a planned baby we would have taken precautions. This way we didn't mind. (So she was an accident?) Well, I don't know. Maybe a planned accident.

Looking at the planning status of the two children, we found -- not unexpectedly -- that the range of demographic variables normally associated with "unplanned" first pregnancies were also present for our sample. The majority of women who had had an unplanned first child had had that child within nine months of their marriage (76 percent, 19), had married when they were under twenty (68 percent, 17), did not have either a trade or university training (80 percent, 20), had husbands employed in manual occupations (60 percent, 15) and had annual incomes of less than $12,000 (70 percent, 16). Conversely, women whose first child was not conceived premaritally, who had married when they were twenty or over, who had a trade or university education, whose husbands were in the top occupational classes and whose annual income was over

$15,000 were most likely to have planned their first child (over 65 percent of the women in all of these categories had planned their first child).

Surprisingly, none of these variables had an influence on the planning status of the second child. Women whose second child was not planned were of no particular age at marriage, their husbands did not earn any specific annual income, they did not necessarily have either a high or low level of education and their spouses were not largely employed in either manual or non-manual occupations. The only characteristic that showed any relationship with the planning status of the second child was the timing of that child -- only 20 percent of the children born within eighteen months of the first child were planned, whilst 75 percent or more were planned in each of the other spacing categories. These findings suggest that though the younger, lesser educated women may fall victim to an unplanned first pregnancy, they generally, in Edmonton at least, do not continue in similar behavior patterns.

Looking at those women who had not planned their children, we found that the majority of them -- 52 percent in connection with first births and 80 percent in connection with second births -- had been using some form of contraception when they became pregnant. This seems quite a high percentage, but it is in line with our previous finding of a high level of contraceptive knowledge and use. A greater percentage of women were involved in chance-taking behavior before their first child than

before their second and, in every one of these cases, the women were not married when they conceived their child. There is an extremely interesting literature about why unmarried women engaging in sexual intercourse and not wanting a child do not use contraception (see, for instance, Luker, 1975) and we will only mention here that the reasons our women offered for not using contraception were in line with those the other researchers have suggested:

> I think I thought, oh, it won't happen to me. I just knew I wasn't going to get pregnant when I didn't want to.
>
> It was just sort of spur of the moment.
>
> I never took any precautions because I was dumb and he didn't take any because he didn't want to. I guess I was using hope and that's not a very good method.
>
> I was still going to school and I couldn't get any contraception.

Only 20 percent (3) of our women were engaged in risk-taking behavior when they conceived their second child and in all three cases the women had been using contraception around the time they conceived. Two of the women became pregnant while they were waiting for an IUD to be inserted and the other woman had taken close to a year to conceive her first child and hence felt one or two "slip-ups" after its birth would not lead to another pregnancy.

The most common birth control methods to fail on our women were the appliances -- 26 percent (6) of unplanned first births and 33 percent (5) of unplanned

second births involved a failure with condoms, a diaphragm, foam or some combination thereof. A failure with rhythm or withdrawal caused one first child (4 percent) and three second children (20 percent). An IUD had unknowingly been rejected by one woman which led to her second child (7 percent) and, most surprisingly, the failure of the birth control pill had led to five first children (22 percent) and three second children (20 percent).

The birth control pill has been heralded as the most reliable (other than contraceptive sterilization) method of birth control and yet eight of our women had conceived a child whilst they were using it. If used correctly, the pill is no doubt highly effective. However, all eight of the women experiencing a pregnancy while on the pill had been missing the odd day (in most cases not fully realizing the possible impact of this) and all suggested that this behavior was quite common amongst their friends and relatives. If this is true, that is, if the pill is not being taken faithfully by its users, then doctors and other medical personnel might be wise to distinguish between the pill's statistical effectiveness and its actual effectiveness[21]. If women cannot remember or have a psychological resistance to taking a pill each day (both reasons were suggested: "I can just never remember every, single day.", "I don't like taking pills of any sort and I always took just as many as I thought I had to."), then its effectiveness may well have to be re-evaluated.

The women involved in "planned accidents" appeared not too different from the others on the standard demographic variables. Five women contrived to have both their children "accidents", three of whom accounted for their behavior with religious reasons. There were no differences between Protestants and Catholics with regard to "planned accidents", nor did the variables of social class, annual income, wife's education or age at marriage differentiate between these people and the planners/non-planners. Most of the women who had "planned accidents" were more or less planning to have a child within a year of the time they conceived and hence were "less worried" about a possible pregnancy. Chance-taking with their method of contraception became more acceptable or, if the method they had been using had to be given up, then it was often easier to rely on "hope". If getting or not getting pregnant is not seen as that important, then the desire to use contraception is correspondingly lowered. The one variable that did distinguish these women, and would be in line with the above explanation, was the timing of their resultant children. The modal spacing category for planned first children was between two and three years after marriage, for unplanned first children it was within nine months of marriage and for the "planned accidents" it was nine months to two years. The modal category for unplanned second children was less than eighteen months after the first child was born -- 53 percent of unplanned second births were in this category.

Only 4 percent of planned second births were this closely spaced, but 24 percent of the planned accidents were. It appears as if the "planned accidents" are slightly earlier than the perfectly planned births, but not early enough to be considered complete accidents.

In this section we have examined the "effectiveness" with which our couples used contraception throughout their marriage. We found that the majority of the couples efficiently planned both of their children -- 65 percent of first births and 70 percent of second births were said to be completely planned. Moreover, the majority of women having unplanned children had them through contraceptive failure -- 52 percent of unplanned first children and 80 percent of unplanned second children were due to a failure with a birth control technique. Only three women were "taking chances" when they conceived their second child and one of these women felt she was sub-fecund and the other two were waiting for an IUD to be inserted. Contrary to the previous literature which tends to find the same cluster of variables associated with a series of unwanted pregnancies (see, for instance, Rainwater, 1960, 1965; Askham, 1975; Cartwright, 1976), our women who had unplanned second children were not distinctive on any of our classification variables. Younger, lesser-educated working class women were more apt to have an unplanned first pregnancy, but there was no evidence that they were continuing in similar behavior patterns. They were as likely as any other group to have effectively planned their second child.

7.3 Conclusions

In the first section of the thesis, in which we outlined our theoretical model, we suggested that couples would be motivated to regulate their fertility if their perceived potential output of children was greater than their demand for them. We saw in the last chapter that all but one of our couples felt some need for contraception -- they felt that sooner or later they would have more children than they wanted unless they used some method of fertility control. We then went on in the first section of the thesis to say that though motivation was a necessary condition for a couple to use birth control, it was not a sufficient condition; birth control itself imposes subjective costs (the displeasure associated with using a technique), and objective costs (the time and money necessary to acquire the knowledge and skill to use specific techniques) on a couple. We concluded the discussion on contraception by suggesting that whether or not a couple would actually use a contraceptive technique -- and the degree of success they would have with its use -- would depend on their perception of the costs of fertility regulation as opposed to their motivation to limit their fertility.

In this chapter of the thesis we have examined our couples' experiences with birth control. We have found remarkably high percentages of our couples effectively and efficiently using birth control. All of our couples but one were using contraception at the moment and the

one couple that was not wanted further children. No couple was using the unreliable, natural contraceptive techniques and only 13 percent were presently using appliances -- the techniques with statistically lower levels of reliability and which had previously failed most frequently with our couples. The majority (54 percent) of these women, though, wanted a third child and thus any potential contraceptive failure would result in only spacing problems. The rest of the women who did not want further children and were presently using appliances were normally waiting for a sterilization operation. Certainly no woman expected to be relying upon appliances or natural contraceptive techniques for long into the future. With the great medical shift toward surgical sterilization, the majority of our couples felt this would be their ultimate birth control technique. The few couples who were less sure about sterilization for themselves were in all cases planning on using the statistically reliable birth control pill or IUD. No woman (other than the Mormon woman who wanted as many children as she could have) felt there was any chance that she could not (and would not) be able to limit efficiently her future, potential fertility.

Our model suggests that such success with contraception could stem from two possible sources -- our Edmonton couples may be strongly motivated to limit their fertility or they may be finding the costs of fertility regulation very low. With regard to the first contention,

we have no reason to suspect that Edmonton couples are any more or less motivated than other couples to limit their fertility; throughout the analysis they have been shown to be remarkably similar to other study couples on most dimensions. Our pre-test included thirty-two Scottish couples and certainly we could perceive no major differences between the two groups in regards to their motivation to limit their fertility. The difference between our sample and the others, we would suggest, has to do with the costs of fertility regulation. We hypothesize that, in Edmonton today, contraception is provided in such a manner that most couples find the subjective and objective costs attached to its use to be very low.

In most cases, contraception is mentioned to women by their doctors before their marriage. Blood tests are mandatory before a marriage license can be issued and it appeared that doctors often used this opportunity at least to inquire about the couple's birth control intentions.

> I went on the pills before I was married. I had to go to the doctor for that blood test and he just asked me what I was planning to do about children. I guess I'd have mentioned it, but I was glad he did. And then he gave me a year's supply of the pills. That was really good because I didn't even have to go to the drugstore.

The chief of obstetrics and gynecology at the Royal Alexandra Hospital -- the doctor who supervised our initial contacting of the sample -- said that he introduces the topic of contraception to young women (whether or not they are approaching marriage) in their annual medical check-ups. He did not know the extent to which his

practice was unique but he said he certainly did not feel "exceptional".

For those women who conceived their first child before they had had any contact with the medical profession, contraception would almost definitely be mentioned, again, to them either during the pregnancy or during their hospital confinement.

> (When did you first consider having a tubal ligation?) Well the doctor questioned me -- whether I was planning on going back on the pill after having the baby. This was when I was pregnant.
>
> When I was about six or seven months pregnant the doctor asked if I wanted to try an IUD. After having the one mistake, I thought it would be worth trying.

The idea of women not being "fitted" with one method of birth control or another before they left the hospital appeared to be almost totally unheard of; the provision of contraception seemed to be a taken-for-granted service that doctors provided. Fitting of an IUD, prescriptions for the birth control pill and sterilization were usually done in the hospital after the birth of the baby. If, by happenstance, a doctor did not mention contraception to a woman, then the woman's roommates almost certainly would. Women were constantly being wheeled in and out to have IUD's fitted or to be sterilized and the advantages and disadvantages of the various techniques were a prime discussion topic in the various maternity wards we visited. Cartwright reported (1976: 74 - 75) that in 1973 in Britain 65 percent of her women had discussed methods of birth control with their general practitioner,

29 percent had discussed the topic with the family planning clinic doctor and 25 percent had discussed it with the doctor at the hospital. The chief of obstetrics at the Royal Alexandra Hospital found these figures surprising (and difficult to believe). He himself claims to have never not discussed birth control with a woman and, though he would not say his practice is universal in Edmonton, he did say he thought it was typical.

This is not to imply that all Edmonton women used contraception and used it in an effective manner. There were women who although they were offered reliable contraceptive techniques did not appear to want (or "be able") to use them. These couples were, though, a very small percentage of the sample and, in all of the cases, wanted additional children sooner or later. Moreover, because surgical sterilization was so readily available for a couple once they had reached their "ideal" family size, these women would not be having large numbers of increasingly unwanted children. Two women, in particular, typified this pattern of behavior. Both had less than a grade twelve education, both had had a premarital pregnancy, both were living in sub-standard housing and both were having difficulties using birth control -- in other words, both were the type of woman who in Askham's (1975) study or Cartwright's (1976) study would have likely been having large numbers of children. These women, though, were confident that they would be able to control their future fertility.

Mrs. A (aged twenty) wanted "two or three or four" children; her husband wanted "two" ("For this day and age, two is good for a family."). They had had two boys, though, and her husband did "like the idea" of having a girl. Mrs. A was meant to be on the birth control pill at the moment but had decided it was too "dangerous". (This woman was quoted on page 241 to show the extent to which the medical profession can "pressurize" women to control their fertility). She wanted to have an IUD fitted, but found it difficult to get an appointment. In Edmonton, a doctor will only fit an IUD during the menstrual period, but doctors' offices require a woman to book an appointment a month in advance. Mrs. A found it impossible to plan what she was going to be doing "a whole month in advance", and had been unsuccessful during her last menstrual period to secure an appointment by somebody else's cancellation. She was going to try for an appointment again next month but, in the meantime, her husband was meant to be "taking care". She realized, though, he was "very bad" about being careful. Moreover, her own attitude to the condom was: "You can get pregnant from them just as easy. You just need one little hole and you're pregnant". Mrs. A was twenty when we interviewed her and about her future birth control plans she said: "I believe the wife should do it (i.e. be sterilized) because if anything happens, say like divorce, it's usually the women who do get the kids and I feel if Rob ever remarries, I'd feel he should have children with the woman he married. . . . I'd probably wait till I was twenty-five (before being sterilized). I'm twenty-one in June so that would give me three years to decide (whether or not to have a third child)". She took it for granted that she would be sterilized and we predict she would have one or two additional (likely unplanned) children and then be sterilized.

Mrs. B (aged nineteen) had just turned seventeen when she had her first child. She herself wanted "five kids" when she married but because she and her husband were having severe financial difficulties at the moment, she was unsure how many children she now wanted. Her husband wanted "two -- a boy and a girl" but they had had two girls. A number of times during the interview Mrs. B talked about having four children -- the two they had now and another two they would have "when they were really financially set up". When I asked if they would go on if they didn't feel financially set-up, she replied "No, it'll have to be if we were financially able. Unless, of course, if it was an accident". Mrs. B conceived her first child while she was taking the birth control pill, and now dismisses it as a completely unreliable method: "I just know I was on

the pill when I got pregnant with her. And my girlfriend was the same thing." Between her children she and her husband were using condoms but they took a lot of chances: "We just took a chance. Well, it's so bloody annoying to use". At the moment they were using condoms (and taking chances) but Mrs. B's husband wanted her to have an IUD. "I don't want to, but he wants me to. He wants me to use the coil, but I can't be bothered going to get it. Because I don't trust anything any more. There's chances on all of them, so I'll take my chances this way." There was more to her refusal to use a coil, however: "I want to go for the coil, but I just can't be bothered doing stuff like that. If I have to wait, it makes me mad. My mom has an IUD in and she's had nothing but problems with it. And I can't -- there was one month she bled for three weeks in a row from this stupid thing. I can't be bothered. I don't have time to worry if I'm going to bleed to death or if something is going wrong or if all of a sudden I'm pregnant and I have this coil in me". About her future contraceptive intentions Mrs. B said: "I want to (be sterilized) but Brad wouldn't let me. The way he figures, if something happens or he dies or we divorce or something, if we remarry, if my new husband wants a family he should be able to have one. It's not fair. I'd like to though". When I asked who she thought would win out, Mrs. B said with a laugh "Me, because I'm a stubborn little cuss". We would predict that Mrs. B, like Mrs. A, would have one or two additional (and likely unplanned) children and then have a tubal ligation. After outlining all the problems she'd had with contraception, she added: "I would rather just have . . . that's what I'd really like . . . If we were financially okay right now, we want four kids, have four kids, tubes tied, then I don't have to worry and he doesn't have to worry. But he won't let me do that either".

Our conclusion, thus, is that the high rate of effective contraceptive use that we observed amongst our sample was a product of the fact that, in Edmonton today, any couple with any desire to limit their fertility are finding the costs of using contraception to be quite low. There are exceptions of course, but there are not that many and, with the availability of sterilization, these exceptions will increasingly also be perceiving the costs of fertility control to be within their reach.

PART III PATTERNS OF FAMILY FORMATION

CHAPTER EIGHT THE FIRST AND SECOND CHILD

We began this thesis with the aim of exploring the various patterns of family formation -- the ways families have been built up and the future fertility changes that are anticipated. After introducing the problem and outlining our research techniques, we subjected the data to a quantitative analysis; each of the major topics the interview covered was coded and examined for its influence on the timing and spacing of the couples' two children and their future fertility intentions. Alongside this analysis of the data, we proceeded with a qualitative, "interpretive" analysis; by this we mean that we sought patterns in the data from reading the interviews as units.

We would argue that both types of analyses were important to meet our aims. Most previous fertility studies have been of a quantitative nature but we felt that if we had limited our study in a similar manner, we would have accomplished less than we had wanted to. We were tempted initially to proceed with a purely qualitative analysis and, yet, we feel that we personally would have been unable to move beyond generalities if we had done so; the quantitative analysis provided the means by which we could take "explanations (which) consist of chains of reasoning in the actors themselves" (Hawthorn, 1968: 73) beyond mere description.

The only difficulty we encountered in trying to combine a quantitative with a qualitative analysis had to do with sample size. Whereas a quantitative analysis demands a large number of cases, a qualitative analysis becomes truly "un-do-able" if there are too many cases involved (or, at least, "un-do-able" by one researcher). We chose one hundred and five as our sample size because we felt, given our time constraints, it was a reasonable number. In fact, while one hundred and five cases was small for the quantitative analysis, it was enormous for the qualitative analysis. When one is involved in going through fourteen or fifteen pages of transcription, searching for and writing out stretches of conversation on a particular theme, one hundred and five cases can seem immense. One topic would often involve fifty or sixty hours of work and it still had to be organized into some sort of framework. Faced with these difficulties, we decided to continue with the qualitative analysis by concentrating on one or two themes concerning each family formation stage. This was not our original aim, but we felt it was the only feasible alternative open to us.

In this third part of the thesis we shall examine the results of our qualitative analysis -- the patterns of family formation will be considered in light of the results of the quantitative analysis and in light of the explanations the women themselves gave for their behavior. In this chapter, we shall examine the time period from marriage to the second birth and in the following chapter,

we shall consider the couples' attitudes and intentions regarding a third child. In the final chapter of this section, we shall integrate these results into our theoretical framework.

We should perhaps begin our analysis by pointing out that "having a family" was really no decision at all for the majority of our couples. All but one began marriage with the understanding that sooner or later they would have children. Many commented that the issue was never explicitly discussed with their spouses -- it was just "taken for granted" or "assumed" that one day there would be children. It seemed as if in their discussions with us there was an implicit linkage between marriage and childbearing. Not every woman was as explicit as the woman who said "That's really what marriage is all about, don't you think. Having kids", but there was a feeling in the majority of the interviews that children were inevitable -- they were part and parcel of a successful marriage.

We unfortunately did not question our women closely about "why" they wanted children -- we accepted the taken-for-granted and moved quickly into how many and when -- but it may be useful to examine some literature which has attempted to. Judith Blake (1968, 1974) was one of the earlier researchers to point out the "necessity" of children. In a critique of the economic theory of reproductive motivation, Blake suggested that couples will never curtail their family size to be in line with their

income because of those societal and familial institutions which "motivate almost everyone to have some children".

> By exercising control over every step in the reproductive process, but principally by a ruthless exclusion of structured alternatives to and substitutes for family statuses, family satisfactions and kinship affiliation -- alternatives that extend from prostitution and homosexuality, on the one hand, to celibacy and careers for women on the other -- societies channel motivation in the direction of goals <u>that imply the advent and existence of children</u>. One can become a "parent", "have a family", be a "mother" or "father", only by acquiring children. That one should desire these statuses is the final result of complex institutional control, but <u>given this desire</u>, children and only children can satisfy it. It is the societal support for the family that provides the strong desire for children. . . .
>
> Blake, 1968: 22 - 23
> (Emphasis in original)

More recently, Busfield and Paddon (1977) attempted to analyse some of the salient ideas underlying the belief that children are essential to a marriage that they noticed amongst their sample couples. Working primarily with a pilot sample of fifty cases from Ipswich in Britain, Busfield and Paddon outlined a number of related ideas which appeared to underpin the "automatic assumption" that married couples will want and will have children. Upon rereading our interviews, these ideas or themes also seemed to be present[1].

Their first point was similar to Blake's: just the <u>idea</u> of becoming <u>parents</u> was important enough for some couples to have children. Particularly for the women, becoming a mother was very important -- possibly, Busfield and Paddon suggested (1977: 134), because the female identity is so closely tied up with the familial roles of

spouse and parent. Our women would say again and again:

> That's all I ever really wanted to do -- get married and be a mother.
>
> I think, for a woman, it satisfies an inner kind of thing that you can't really pinpoint.
>
> I'd feel so empty (without children). It's a real responsibility; it makes you feel like you've built something.

The second salient idea had to do with the self-reinforcing connection between marriage and childbearing. Because having children is often seen as a major reason for marrying, to not have children becomes illogical. "It (the connection between marriage and having children) makes those who want to have children marry, and it makes those who marry feel they should have children . . . having children is seen as the essential purpose of marriage, and . . . this idea makes it difficult to think of not having any children if you marry . . ." (Busfield and Paddon, 1977: 134). Related to this idea was the feeling that children were essential to a successful marriage. Some couples felt that without children there would be no bonds holding a husband and wife together -- there would be little reason for a marriage to survive or succeed. The quotes that Busfield and Paddon included were almost, word for word, the sentiments our women expressed:

> It wouldn't work for us; a marriage isn't really complete until you have kids.
>
> Without children, I don't think myself we would have had a marriage. Because I feel you should have children.

> What's the point of getting married if you don't have kids? You might as well live common-law or stay single.

The third salient idea outlined by Busfield and Paddon was the feeling that children "make a family". A family was only a family if there were children -- they were the sine qua non of family life. Since most people want a family life -- it is a life felt to be more exciting and interesting -- having children becomes essential. "When asked about having children most people draw upon a set of ideas that links getting married, having children and having a family to one another, making all seem mutually interdependent. Underlying this set of ideas is the belief that a married couple with children constitute a natural, normal and complete family. Without children a married couple are not a proper family" (Busfield and Paddon, 1977: 135 - 136). Again, our women would comment:

> I don't think it's a family unless there's at least one child; I don't think it's right.
>
> To me, they really just make our home.
>
> People would miss lots without children -- a feeling of nature, sort of, part of -- not even a tradition, just "that's the way it is".

The final idea that Busfield and Paddon were able to derive from their interviews to account for the implicit assumption that married couples would have children was the feeling that children are so emotionally satisfying that they "are an experience not to be missed". "Many people believe that having children and bringing them up

will give and does give them a great deal of pleasure; they think that having children is emotionally and even intellectually satisfying; they think life with children is richer, more interesting and more enjoyable than life without" (Busfield and Paddon, 1977: 137). This is not to imply that nobody saw any disadvantages attached to children, just that the rewards and satisfactions were clearly superior. Our women as well would comment:

> I find it a little hard to understand (why some people do not have children) because I think having children to look after opens up a whole new world to you which you just don't know about if you haven't experienced it. It increases your understanding of human beings and what the world is all about.
>
> I feel sorry for them because there are a lot of great things about kids.
>
> I couldn't think of not having my children -- they really are delightful.

In sum, Busfield and Paddon (1977) found great normative pressure amongst their British couples to have a family, in a way Judith Blake (1968) hinted was operating amongst American couples, and which we felt was apparent amongst our Canadian couples. A cautionary note, of course, is that Busfield and Paddon, and ourselves, were dealing with a sample that through their behavior had chosen parenthood and thus the comments and underlying sentiments cannot be generalized to the population at large[2]. However, for our women, and apparently for Busfield and Paddon's, the thought of remaining voluntarily childless was never seriously entertained.

If children are assumed to be inevitable, then the question really becomes when the family should be begun.

Amongst our couples two primary themes were mentioned by most women when they were asked "In your opinion, if a couple had complete control over their fertility, how many months or years should there be between getting married and having a first baby and why?" -- one theme which would encourage delaying a child and the other which would encourage having it. The feeling was that a couple needed time to adjust to being married before having children, but that a couple must be careful not to "get set in their ways". One needed time to get to know one's spouse and to adjust to living together before adding the complications of a pregnancy and a child --

> I'd say to get pregnant at least a year after marriage -- at least a year. It gives the couple time -- even if you live together before marriage it's not the same as being married -- it gives the couple a chance, not really to get to know each other, that too of course, but settled with one another. You have to get used to one another and, of course, get used to being married.

> I'd say about five years but that's from my own personal experience. We waited five years and we had a chance to grow this really strong bond between us before we had a child. I certainly don't agree that having a child will keep you together or make you closer together. It makes you further apart, if anything. So if you wait before you have your family, you have time to build a strong bond with one another and a really solid basis to your marriage.

But, against that, one could get so used to being just a couple if a child was not had fairly quickly after marriage that its intrusion would be resented.

If a couple waited too long before beginning a family, they would get too used to being able to come and go as they pleased and too used to all the advantages that two salaries provide.

> I don't think you should wait too long because you tend to, maybe you come to not like children. Mainly it's because you get used to your freedom and you resent it when it's gone -- you get thoroughly turned off. Also, you get too used to the wife's money if she is working, which she probably is. And she won't want to get tied down, if she's had a lot of freedom, she probably won't want to get tied down with having a family.

> If you wait any longer than a year or so, you're getting just a little bit too used to things the way you want them -- coming and going as you please, buying what you want, just everything. Then when you start thinking of a family, it's kind of hard to all of a sudden start saying, okay, this is it, you can't do this, you can't have that. It's a real shock cause a baby really does change everything.

Most couples when discussing how they decided when to have their first child mentioned these two push and pull factors -- they felt some pressure to delay so that they could adjust to one another, and also some pressure to begin before they got too used to one another. What varied widely amongst the couples, though -- and was reflected in the different birth timings -- was how long they thought it took "to get to know one another", on one hand, and how long they thought it took "to get set in their ways", on the other[3]. These ideas seemed to stem from other values and views the couples held regarding marriage and the place children held in it and,

in many cases, varied along social class lines. There are three main constellations of ideas which we wish to discuss and which we feel account for much of the variation we found in our sample in regards to the timing of the first child.

The first view that we came across amongst our sample couples was the view that "marriage was children" -- the only reason, or the primary reason, to marry was to have children. As we commented before, all our women but one began marriage with the idea that they would have children, but these women stood out by the primary importance they placed on children in a marriage. Perhaps not surprisingly, this view was expressed most frequently by the women who began trying for a child more or less immediately after their marriage. They felt that children were such an important part of life itself that, once married, there was little or no reason to delay having them. Possibly a short period of time could be envisaged to get to know your spouse but even this, some suggested, could be accomplished during the nine months it took to have a child. The essence of this view is captured in the following woman's discussion of why she had her first child within the first year of her marriage and why she would suggest this line of behavior to others.

> We had her in the first year of our marriage and it was really good. I don't think anybody should wait longer than a year, at the very most. I think children -- they're, that's what makes a family -- that's marriage complete. I don't see any point in waiting, you might as well have them and enjoy them. I find it funny when people just get married and then they wait to have children. It sounds odd

to me. Why wait? (They might wait so they can get to know one another and do things together before they have children.) I don't understand that at all. Why are they getting married if they don't know one another -- anyway, it takes nine months to have a kid.

In the quantitative analysis we found that working-class women (particularly those whose husbands had unskilled manual jobs) were most likely to begin (and, most importantly, want to begin) their families quickly after marriage. From our qualitative analysis, it would seem that this was a direct result of their holding this view of marriage. Again and again, when we went through their accounts of "why" they had had their first child when they had (or wanted to have, in those cases where subfecundity caused a delay), they would comment on the primary role children played in their marriages.

(Why did you want to have your first child then?)

I wanted to start a family; I can't see a marriage without kids.

You get married to have kids, in a way. I sure did.

To me, to us, the greatest thing in life was to have a baby and we wanted one as soon as possible. We were very anxious to have a baby right away.

I wouldn't want to be married with no kids. I wouldn't get married.

The second view that we encountered amongst our sample couples was the view that, though children were inevitable, they must "take their place" behind the accumulation of certain material goods and assets. The women expressing this view all saw children as playing an important part in their marriages, but felt no need to start their families immediately. It was more important, in the early

years of their marriage to get to know their spouses and to acquire a home, clear debts, or just generally "establish" themselves. With most couples, "establishing" themselves took two or three years and then the interest turned towards a child.

(Why did you want to have your first child then?)

> We owned our own apartment and it had two bedrooms and we had a car. We were pretty well off actually and it just seemed a good idea.

> We had achieved . . . we were married two or three years and we were used to one another. I had just finished a course and we had just moved into our house and it was furnished comfortably. Everything seemed to fit in and we just decided it was time we had our family. As they say, once you get a little security around you, you start thinking of a family.

> We just wanted children. We wanted them earlier but at the time we just couldn't really financially see ourselves having children because we didn't own our own home yet. We just couldn't have them just then.

From the quantitative analysis we knew that middle class women tended to wait two or three years before trying for their first child and, when we examined their interviews, it seemed, in many cases, to be precisely because they wanted to accumulate certain assets before having a family. This attitude was not limited to the middle class, though -- some members of the working class (normally the skilled manual members) also were timing their first child to the accumulation of certain material goods.

> (The husband was employed as a technician and the couple had just bought their first home (a condominium in a "dormitory" town fifteen miles from the city) two months before their second child was born. The woman had her first child after two years and one month of marriage. She conceived this child the first month she began trying and when asked why they had wanted their first child then, she responded:)

> We kind of got things together -- some furniture and stuff -- and we decided it was probably a good time to start because we had all the basics. We didn't care if we had super-nice stuff as long as we had the basics. Before that it was kind of impossible because we were getting our feet on the ground.

Most couples holding this view were trying for their first child after two or three years of marriage but, in some cases, it took them longer than average to acquire the "necessary" assets and, hence, the first child was delayed.

> We said we'd have a child a year after we got our first home. It took us five years to get, but when we did, that was it -- we had the baby.

The final constellation of ideas that we felt was evident amongst our sample couples (at least the final constellation that we wish to discuss) was the view that children must "fit in" around other plans and activities of the husband and wife. This constellation of ideas was held by the fewest number of couples, but did seem discrete. In contrast to the previous two themes, the women holding these views tended to stress how important it was for a couple to "really" get to know one another, and to accomplish individual goals, before having their first child. It was perhaps most indicative that they were least likely to feel that couples would be "missing something wonderful" if they chose not to have children and most apt to feel "whatever a couple wants out of life is fine by me". One example of a woman who we felt expressed this view of marriage and children is as follows:

> (Began trying for first child after five years of marriage.)
>
> We had things to do and we wanted to get to know

> each other and so we thought we'd better wait awhile (before having the first child). . . . We had a chance to grow this really strong bond between us before we had a child; we had those years to build a strong bond and a good basis to our marriage. And we did a lot of things that we couldn't -- that we can't do now. Like travelling and seeing things.

Whereas the two previous constellations of ideas generally fell along class lines (i.e. the first constellation was more common amongst the working class and the second constellation was more common amongst the middle class), this could not so easily be seen for this constellation. It may have been slightly more common amongst the middle class, but its most striking characteristic was that the women who we felt held this view of marriage and children had all done things "out of the ordinary" before their first child. They had either travelled, been employed overseas or they or their husbands had had an extensive education. Most interestingly, in most cases, it was their age which finally "pushed" them to start their families.

> One reason we didn't have him any later was because we wanted to have more than one child and we didn't want to wait too late -- like into our thirties before we finished having our family. So when I was twenty-six, we thought we'd better start soon. And we were completing our work in Puerto Rico and coming back to a place we thought was our home, at least for awhile, so we thought it was a good time to start.
>
> (We started our family) because we'd been married five years and if you wait any longer you'll be thirty, which is getting a little old by the time they're . . . the generation gap. (Why not earlier?) We were enjoying ourselves too much -- doing what we wanted to do by ourselves. We just weren't ready to have children then.
>
> I was twenty-nine at the time and I did not want to have children any later. We were planning to have two, so. . . and that was the time we just felt ready.

In sum, we found in our qualitative analysis of the interviews two main themes regarding when a couple should start their family -- one which encouraged delaying the first child (so that the couple could "adjust" to one another) and the other which encouraged having the first child (so that the couple would not resent its "intrusion"). How long each of these stages took, however, varied widely amongst our couples and seemed to stem from the couple's view of marriage and the place of children within it. Three major constellations of ideas seemed to be apparent:

a. children were the primary reason for marriage and, hence, once married, it was best to begin the family as quickly as possible.

Women who held these views tended to be from the manual social class (more specifically, their husbands tended to hold unskilled or semi-skilled jobs) and they were quick to condemn those women who delayed having their first child for any great length of time ("I think it's selfish just getting married and not having kids."; (Did housing or economic considerations influence you?) "Heavens no! Family comes first before anything like that. It makes me sick when I hear people talking about a baby like they would a new car or something.").

b. children were essential to a "good" marriage but the first task of a husband and wife was setting up a home and getting financially established.

Women who held these views normally were from the non-manual social classes and timed their first child, in most cases, to acquiring some sort of home for them-

selves. In direct contrast to the first set of women, they tended to condemn couples, or feel it was "irresponsible" of couples, to have children "before they can even afford them". They were as likely to condemn, though, those women who delayed their first child for "selfish" reasons -- "I think it's important to work towards being in a position to afford your first child once you get married. If you want to travel and all that, maybe you're not really ready for marriage. It's a bit selfish, I think, not to make some arrangements for the baby."

c. children added to a marriage but they must "fit in" to other plans and arrangements the couple might have.

The one characteristic that seemed to single out the women holding these views was that none had simply gotten married and had a baby or "worked towards" having a baby. They had either travelled, worked overseas or, in a few cases, held a fairly demanding job for which a child "just had to wait". In most cases, the first child was timed to the woman's age -- as she was approaching thirty she felt she had to "get busy". These women were the least likely to criticize other birth timings; they tended to feel others should do "as they please", but at times would suggest that they "felt sorry" for young girls with babies or "turned off" by people whose primary goal in life seemed to be "owning the largest house on the street".

We have presented these three constellations of ideas without any reference to the previous literature.

Certainly the tendency for working class couples to have their children relatively quickly after marriage and middle class couples to delay has been noted before (Woodward, Heath and Chisholm, 1978; Cartwright, 1976; Peel and Carr, 1975; Woolf, 1971). However, we could find no reference to this being due to differing attitudes about marriage and the place of children within marriage. Askham (1975) suggested that different social groups possess different types of orientation towards areas of social action and that this influences their family-building behavior. There is, for instance, a "lower working-class orientation" (i.e. a present rather than a past time orientation, an inability to control the major events of their lives and a negative evaluation of material wealth and esteem) which is why working class girls marry young and have greater difficulties managing their fertility. This may or may not be true; as we suggested earlier (see pages 70-71), we felt there was a tendency for our working class couples to be present oriented, but we had no direct measure of it. This has, moreover, little direct relevance for our classification scheme. Regardless of "why" couples held the attitudes they did, they did appear to hold them and, more importantly, these sets of attitudes did appear to "make sense" of their behavior. This is also the case with researchers such as Ineichen's (1976) suggestion that there are very positive social reasons why young working class girls should want to have babies. There are very good reasons, not the least of which is that these women held a constellation of ideas that suggest that children are one

of the most important parts of marriage.

Whereas variation in the timing to the first birth was tied to social class, this was not so with the timing to the second birth. Once the family had been started, subsequent births appeared to be influenced mainly by the desire for a specific interval of time between children[4]. When we asked the women "In your opinion, how many months or years should there be between the first two children and why?" most answered with reference to the first child. There appeared to be two competing considerations -- it was important to have children relatively close so that they could be playmates, but it was important to have some space between them, so that the parents could "cope" and each child could get the attention it deserved.

Most couples -- regardless of their social class -- were attempting some balance between these two competing demands. They felt approximately two years was the best space between their children because it was close enough for the children to be "friends", but far enough apart for them to be able to "manage" and give each child its "share" of attention.

> I would say two to three years between children. They're close together in age so they'd make good playmates but anything less than two years is too hard on the mother.
>
> About two years because it gets the first one up and out of diapers -- sort of on its own -- and yet they can still play together.
>
> A couple of years because the kids are close together and when they're older their interests are the same. But, still, you'll have been able to spend some time with each one and teach them things.

The comments of the minority of couples who felt relatively shorter, or relatively longer, intervals were best for children further revealed this "balancing" of preferences. Some women felt that couples should have their children as closely spaced as possible and in all of these cases the reason was so the children could be friends.

(How far apart should you have your children?)

> Between nine months and a year. Right away get pregnant because if you wait three, even two years . . . like I said, I've been around a lot of families and I've watched their kids and even two years makes that difference; "I don't want to take my little sister with me" and that little sister feels bad because she's small and she can't go with the rest of them. To me kids should be close together. This way, if Mom is busy, they could help one another. When they're close like that, it just seems like a friendship there. (but wouldn't that be hard on the parents?) Maybe, but it depends what you want out of your family. Like I wanted mine to be friends, to play together.

> I think children should be close together, to be truthful with you. If a person can stand it, I'd say have them right away. I have a friend who has children ten months apart and, they're older now, they're so close. They are playmates for each other all the time -- the same as if they were twins. I wanted mine that close but it took me about a year to get pregnant and, when they're that far apart, . . . my little guy is bored all the time. (Wouldn't it be hard on the mother to have them close?) Sure it's hard on your system, but some people have them all together. That's what I wanted to do. It's best for the kids.

Conversely, some women felt that couples should have their children relatively far apart and, in all these cases, the reason was so that the mother could give each child adequate attention and be able to cope with the family's demands.

(How far apart should you have your children?)

> Three years. I feel you need time with your baby to be able to see what its wants and needs are. And be able to -- you'd get so upset, well, I would get so upset if I felt I was pregnant right after. . . I'd go to pieces. Because I feel, take your time and enjoy your child and then if you want another one, okay. But be sure to let your first one have time too. You shouldn't rush through it and then, "there you are" all done.
>
> I'd say three years and maybe four years apart. The first one would have a better understanding of things and it would give the parents a little more time for individual attention and, as I've been telling you, I think that's very important.
>
> I thought at first six years would be too far apart but now I'm beginning to think it is a nice age because he really enjoys the baby. I had him alone for those years and I think I've given him enough attention in the last years to really help him -- he's really very advanced for his age. (But will your children be friends? Some women want their children to be friends.) Yes, but he really enjoys the baby. He can play with him -- not looking after him -- but entertaining him and he seems to think it's all right.

In the quantitative analysis we found two factors which distinguished women who wanted their children close from women who wanted them far apart -- the first was a measure of how important couples felt certain material goods were for children and the second was when the woman intended to return to work. We felt that these two factors were tapping differing conceptions couples had of how much time, attention and material goods should be lavished on children -- those couples who wanted children close were less concerned about "investing" their children with individual time and attention than those who wanted their children relatively far apart.

The qualitative analysis reinforced this basic idea. It appeared, to repeat, that there were two primary constellations of ideas about how children should be spaced

which stemmed from differing ideas couples had about family life and what was best for children. There were women who felt the most important thing in a family with regard to children was the interplay between siblings. It was most important for children to play together, to learn from one another, and just generally to be friends both as they grew up and into the future. This was best accomplished by having children as close as possible and this was these women's aim.

Conversely, there were women who felt the most important thing in a family with regard to children was to provide each child with the necessary requirements for a successful future. It was most important for children to have individual time and attention from their parents so that they would be successful as they grew up. This was best accomplished by having children spaced widely (more time could be spent with each child) and this was these women's intention.

Most couples fell somewhere between these two "ideal types" because they were attempting to balance the two sets of ideas, but the exact spacing of their two children did appear, in many cases, to reflect the relative importance they placed on each of these two perspectives.

In this first chapter of the qualitative analysis we have examined our couple's family-building behavior from marriage to the birth of their second child. We initially noted that all but one of our couples began marriage with the understanding that sooner or later they would have children. This was, moreover, not an

"issue" with these couples -- it was a taken-for-granted assumption that children were inevitable in their marriages.

Timing to the first child seemed to stem from the couple's view of marriage and the place of children within it. There were three constellations of views that we noted. First of all, there were those couples (largely working class) who felt children were the primary reason for marriage and hence, once married, it was best to begin the family as quickly as possible. Secondly, there were those couples (largely middle class) who, though they felt children were essential to a marriage, felt it was more important for newly-married couples to establish themselves financially. These couples were most likely to wait two or three years before beginning their families. The last view of marriage and the place of children within it that we were able to isolate in our data held that children added to a marriage but they must "fit in" to the other plans and arrangements the husband and wife had. The couples who felt this way were not characteristically middle or working class and, in most cases, it was the woman's age which prompted them to have their first child.

Timing to the second child seemed to be influenced mainly by the desire for a specific interval of time between children. There appeared to be two competing considerations -- on the one hand, it was important to have children close so that they could be playmates and, on the other hand, it was important to have some space between them so that each child could get its share of attention. Most couples were trying to balance these two

considerations; however, some couples clearly thought it was friendship between siblings which was most important in a family and they tended to have their children closely spaced. Conversely, some couples thought preparing each child individually for the future was most important and these people tended to space their children far apart.

In this second chapter of the results of the qualitative analysis we shall examine our couples' future fertility intentions. As we mentioned previously, all of the couples but one began marriage with the intention of having children. All but one also began with the intention of having more than one child.

The dislike of the one-child unit has been widely noted. The Indianapolis study of the early 1950's (Solomon, Clare and Westoff, 1956), for instance, reported that a major reason couples gave for having a second child was the desire to avoid the "only child" child rearing situation. This was also reported in the more recent studies of, for example, Cartwright (1976) and Peel and Carr (1975). Our women, as well, felt that an only child would be socially handicapped; the child would either be too "lonely" or too "spoilt" or both.

> I don't think one is enough. An only child gets spoilt too bad.

> I don't think it's totally fair to the child, not to have a brother or sister. If he had stayed an only child, I think he'd have been terribly self-centered because we devoted our total attention on him.

> I object to an only child because I think they're missing out on a lot -- having a playmate and being in a family. I think it makes more of a family if you have more than one. And not only that, but once we're gone, they won't be so terribly alone.

However, if the one-child family was to be avoided, so too, it appeared, was the "large" family. Increasingly, fertility studies are concluding that in developed coun-

tries such as the United States, the United Kingdom and Canada[1], most couples plan on having between two and four children. Certainly none of our women, with the exception of a few who were strongly committed to religions which actively promoted procreation, were planning on any more than four children. Even these very religious couples were thinking in terms of no more than a family of five or six. In this day and age, the traditionally large families[2] are, by and large, not being considered. Moreover, with the availability of the effective modern birth control techniques, we can expect, at least in Edmonton, people's wants and desires to be successfully carried out.

Within this narrow range, though, there is some variation -- some couples with two children definitely do not want more, some definitely do and many are undecided. In the quantitative analysis we looked at some of the correlates of our couples' intentions regarding a third child and we will now consider the results from the qualitative analysis. We proceeded with this stage by examining the interviews of the couples who were definitely (or probably) going on, then the interviews of those who were undecided and finally the interviews of those who were definitely (or probably) stopping with two children. We shall present our results in a similar manner.

There were twenty-seven couples in our sample who we felt were definitely planning on having a third, and

possibly a fourth, child. Three of these couples had had either two boys or two girls and were only going on to have a child of the opposite sex. If their first two children had been a boy and a girl, they would not now be planning a third child. It was this desire for a boy and a girl which was the motivating factor for the larger family.

> Two is ideal -- a boy and a girl. That's what we wanted, but I've got two boys. I'd still like my girl, so we'll try once more. If I don't get my girl, I think I'd stop. If I get my girl, I'll definitely stop. (If you'd had a boy and a girl?) I would have stopped with two. That would have been it.

The recurring theme throughout the other women's explanations of why they wanted more than two children was the view that a family of two was not really "a family" -- two children were just "not enough". There appeared to be four interrelated ideas about why this was so -- that is, the advantages of more than two children -- and we will outline each.

a. The first idea was that children are so enjoyable that it really is a case of "the more the merrier". The women expressing this idea seemed truly to enjoy children and, hence, wanted more than just two.

> Three is a nice number. I like children and it doesn't really bother me to try and raise them.
>
> (Why three and maybe four children?) I think it's the enjoyment you get from them and what you can give them emotionally which would make us (have a third child). I really like babies.
>
> I'm not satisfied with just two kids. I love kids and two is not enough.

b. The next idea was that children are happier growing up in a larger family. It was nice for children to "have a brother and a sister, instead of just a brother or a sister".

> I just think more kids, if there are more kids, they're happier together. I think more children, they're happier kids.
>
> I think four is nice. They have playmates and, I don't know, it's nice to have brothers and sisters.
>
> More children are company for each other. Two isn't company; they spend most of their time fighting. And a big family, it's just fun for the kids.

c. The third idea was that children can be "raised better" if there is more than one other sibling. They have a greater chance of learning about sharing and co-operation.

> To me, I don't think you can raise your kids properly with only two. A lot of people do but it's not good for the kids -- you gain a lot of knowledge from having brothers and sisters.
>
> I think a large family is better for children growing up. I don't know, it's just a personal feeling, but I tend to feel in a smaller family, the children get -- not necessarily more attention -- you tend to dwell on their problems too much. If you had more, they might tend to work them out themselves.
>
> I think four because they learn a bit more than a smaller family does about sharing and co-operation.

d. The final idea we were able to isolate from the women's explanations of why they wanted more than two children was the feeling that, with a larger family, there was a greater likelihood of children and grandchildren visiting in future years. For most of the women, this appeared to be highly valued.

When you get older, it's nice to have kids around you.

When you get older and you have more kids, you have kids coming over and stuff like that. I think I'd like that.

I want three or four. Cause I always think then you'll always have somebody coming home.

Most of the women wanting a larger family mentioned two or three of these ideas. They felt two children were not a "proper" family and, because they saw positive advantages of more children, they were planning to continue with childbearing.

The women who were <u>most</u> favourable towards larger families were those whose first two children were a boy and a girl. Most couples wanted a child of each sex and those whose first two children were either two boys or two girls usually also gave this as a reason for having more children (twelve out of the fifteen who had had two boys or two girls). Some, in fact, suggested that they might have stopped with the two if they had had a boy and a girl.

We always wanted four; now I think it's four or a boy, which ever comes first. So if we have another girl, we'll give it another go for a boy. I think three is a nice number. It's not excessively large, but it's not small. . . . You know, if I'd had a boy this time round, we may have even stopped at that. It's hard to say.

We'll probably try once more for a boy. I wouldn't mind stopping at two girls, but I would like to try and see if I could have a boy. And I like a larger family. Three is a nice number. (If you'd had a boy and a girl, do you think you would have stopped with two?) I really don't know. We'd have had to think about it.

This was not the case with the couples who had had a boy and a girl. They wanted larger families primarily because they liked larger families.

During the qualitative analysis one interesting thing that we noticed about the couples who were definitely planning a larger family was that many of them had begun their marriages with even larger family size aspirations. The three or four children they were now planning, while large compared to the majority of other couples, was smaller than they had originally intended. There appeared to be three reasons why their original intentions had changed; one involved economic considerations, another coping considerations and the third "normative" pressures to stop with two children. We shall consider each in turn.

a. A number of women suggested that although they had started their marriages wanting four, five or six children, they now realized that three or four was all "they could afford".

In the quantitative analysis we found that it was the middle income couples who were most likely to be planning additional children[3]; none were either very rich or very poor. While they tended to take the attitude "We've decided to have children rather than to have wealth; it's an emotional sort of wealth rather than materialistic", none suggested that their family-size intentions would put them under great economic pressure. All wanted more than two children, but not more than

what they could comfortably afford and, "in this day and age", that seemed to be three or four.

> We wanted five children when we got married but, as the years went on, we decided on three. We realized you just can't have large families with the cost of living.
>
> We wanted four, but four is just a bit too much nowadays because of expenses, giving them what they want. If I had five kids my husband would have to work night and day to give them enough. It would be kind of rough.
>
> You've got to draw the line somewheres. We wanted lots but they're expensive to raise. You still want to have a little bit of time and money left for yourself.

b. Some women suggested that they had cut-down on the number of children they wanted once they realized what was involved in looking after them. "In this day and age", with so many interests other than raising children, a family of three or four was enough[4].

In the quantitative analysis, we mentioned that the women who seemed to be coping well with two children were most likely to be considering a larger family. They wanted more than two children but not more than what they could "cope" with and that seemed to be either three or four children.

> Well, we wanted five and my husband actually still feels that way. But I say maybe three, at the most four. I just don't think I could cope with five. People do have five kids, but you've got to have the right constitution. My mother did it, but she's a different type of person. It takes an awful lot -- she's got an awful lot of patience and she devoted everything to us. I just don't think I can be like that. I'll have three, maybe four, but I just don't think I could cope with five.

> We wanted more, but there's so many interests now outside the home I think to cope with it all it's fair to have only three or four children. Both for the children and yourself -- to have some time for yourself.

c. The third reason why couples appeared to have decided on smaller families than they originally had wanted seemed to stem from "pressure" the women felt from acquaintances to have two children. A number of women planning more than two children mentioned that their friends and relatives "couldn't understand" why they wanted "extra children". The women we are considering at the moment had all decided, more or less, to have an additional one or two children, but we felt this "pressure" was one reason why it was not an additional three or four children.

> Nobody seems to be having large families any more. After I had the boy and girl, "oh great, now you can quit" is the comment I got from everybody. Two seems such an idealistic number; nobody can understand why I want more.

> We wanted about five or six children, but not now. As soon as she was born, all the letters that we received -- "isn't that nice, you have a nice perfect family now". They're all assuming that that's it. All of them are saying "oh, you have the perfect family now. You'll be so happy".

In sum, it appeared that most of the couples presently planning more than two children had always had large family size aspirations. However, "for this day and age" (a phrase echoed over and over again), "large" meant three or four.

The final observation that we made during the qualitative analysis of couples who wanted more than two

children was the important part the family of orientation seemed to play in determining anticipated family size. Most couples mentioned that their own families influenced how many children they themselves wanted to have. This was actually the case with all of the couples -- those planning to stop with two children, those undecided and those planning larger families. The confusing aspect to this observation, though, was that coming from a large (or small) family was as likely to make couples want a large as a small family. That is, some women said they wanted more than two children because they themselves had missed having brothers and sisters.

> We want four children. My husband's an only child and I have a brother eleven years older than me so neither of us really had brothers or sisters around us. And we mustn't have liked it much because we decided we want our kids to have lots of brothers and sisters.
>
> I think I want more than two because there was two in my family and it never seemed enough.

Others said they wanted more than two children because they had enjoyed having brothers and sisters.

> I grew up in a large family and I think it's good. I want that for my children as well.
>
> My husband comes from a family of fourteen and I guess that's why we want more than just two.
>
> I think more children, they're happier kids. It's just because I came from a family of five.

Thus, family of orientation seemed to influence the couple's decisions regarding family size, but not as a function of number of siblings. What seemed of importance was the woman's experiences of, and reactions

to, the family she grew up in.

The second set of women we examined were those who were undecided about their future fertility intentions. There were twenty-three couples who were undecided and of the twenty-three, fifteen had either two boys or two girls. The sole reason most of these couples (eleven of the fifteen) were considering a third child was the desire for a child of the opposite sex.

> I always wanted two, but now I'd like a boy.
>
> I wanted a boy and a girl, then stop there. Now we have two boys so we need a girl.
>
> What more is there after a boy and a girl. You can't get anything different, so if I'd had a girl, I would have stopped right there.

The reason why they were undecided whether or not to have a third child seemed to stem from a number of reasons: many definitely did not want three children of the same sex ("We want a girl, but that could go on forever and I really don't want three boys."); some were worried about being able financially to support three children ("We'd try for a girl if money was no object, but unfortunately it's a very big problem."); some did not know whether they wanted to go through another pregnancy and delivery ("The delivery is another reason why we aren't sure whether we'll give it one more go -- whether I want to go through with it again."); some were unsure if they could cope with another child ("It just sort of depends on how much there is to looking after these two. If these two get on my nerves,

forget it."); and, some were unsure if they were willing to be "tied down" with another baby ("I'd like to go to work and, if I have another one, it's a few more years at home."). Most women mentioned at least two or three of these reasons; it appeared that though they wanted both a boy and a girl, they were undecided if they wanted a third child.

The eight couples who had a boy and a girl were in a different situation -- they were similar to the women definitely planning an additional one or two children in that they saw advantages to larger families, but they appeared to be under greater pressure to stop with two children.

Most of the women with a boy and a girl who were undecided about a third child mentioned some of the advantages of a larger family that we were able to derive from the interviews with the women definitely planning more children. They liked children ("I look at him and he's so cute and I say maybe another one."); they felt their children would be happier growing up in a larger family ("When he had a sister I thought, gee, he'll never know what a brother is and she'll never know what a sister is and I think that's a shame."); they felt they could raise their children better with more than one other sibling ("I've talked to a few people who've come from a family of just two and they say it's terrible because all the two do is fight. It's easier, I think, from what I'm hearing, to raise more than two."); and,

they felt more children meant a greater chance of company in their old age ("With two, one'll likely be in Australia and the other somewhere else. With four, I'm thinking, you'll always have somebody coming home.").

They were undecided, though, because they felt under greater pressure not to have a third child. When we looked at the women who were definitely planning more children we pointed out that most had curtailed their original family size desires because of economic pressures, coping difficulties or normative pressures to have a family of two. These reasons had made the women with large family size aspirations limit themselves to three or four children, but these reasons appeared to be making a third child problematic for the undecided. Many of the women mentioned economic problems. Two children they could manage, but three might be problematic.

> The nicest number in a family is three; not too many and not too few. I'd probably definitely have three kids if I had lots of money but, I like my kids well-dressed and when I go out and buy her a little outfit it costs $ 23. So, I don't know.

> I'd like to have one more but it depends on our income -- whether I have to work full-time or part-time or what. Because my mom said two is okay to babysit, but not three.

Coping also appeared to be more of a concern. The women who were undecided were more apt to mention that they might be unable, or unwilling,[5] to manage three children.

> It depends on how much there is to looking after these two. I'm finding my hands full now, so I'll just have to see how I get on.

> I had these two really close and I'd just like a little break right now to get back to normal. So, if I had another one, it would be in two or three years time and maybe then he'll be older and it will be nice just to leave them just as they are now. I might be doing something and not want to get tied down with another baby.

Finally, the normative pressure to stop with two children that the women who were planning larger families mentioned they had run into, seemed to have been taken more seriously by the undecided women.

> We wanted a larger family when we married -- four or five -- and I think I will have another one at least, but . . . A lot of people have said "Oh, you have the ideal family now, why have any more and ruin it" sort of thing. So that's partially why we're undecided, because so many people have commented on it.

> We wanted about four but now, especially since we have a boy and a girl, we haven't made up our minds. Everybody says it's such a nice family we might just be tempted to let well enough alone.

In sum, it appeared that most of the undecided were undecided because their first two children were either two boys or two girls. They wanted a child of each sex, but were unsure, for a variety of reasons, whether or not they wanted a third child. The rest of the women who were undecided about a third child saw advantages to a larger family, but felt for economic or coping reasons, or because of normative pressure not to have further children, that they might be just as well off with two children.

The last group of women we considered was the women who felt it was fairly unlikely that they would be having more than their present two children. Most of the sample

(fifty-five couples) fell into this category -- as we have commented on before, "in this day and age", most couples are planning on a family of two.

What we initially noticed about the women who felt that they would only be having two children was that most of them (over eighty percent) had never expected to have any more than two children. Whereas many of the women who were planning to have one or two additional children had begun their marriages wanting even larger family sizes, this was not the case with the women presently planning a family of two. Two was all they had ever thought they would have.

The reasons that were offered "why" two children often worked from the belief that one was not acceptable and so you had two.

> If you only have one, then it usually turns out spoilt, so you have two. And two you have, I think.

> Mostly, I suppose, one is just fine and you have the experience and you've repopulated one of you anyway. But, then, I always feel badly about a single child. One child, I think, would be so lonely and that's why we had two.

> Well, I don't think a marriage is complete without children and the one was all I really wanted cause, as I said, I want a life of my own too. But I think one child is sort of lonely, particularly if the mother is away working. So two, just to keep the other company.

Not often did we get the impression that the couple "really" wanted a larger family but felt constrained by income or coping considerations -- a feeling which, as we have outlined, we did detect amongst those undecided

or definitely planning larger families.

In the quantitative analysis we found that the majority of the unskilled manual workers were planning to have only two children. From the qualitative analysis we undertook at that stage, we found that these couples were often limiting their families because of economic factors. In fact, it was usually these couples who had begun their marriages wanting more than two or three children. They had found, though, that all they could afford now was two.

> (The husband of this woman fitted plate glass windows.) When we got married I thought six, but my husband thought four would be plenty. You can tell, the people that come from big families, want big families. But we both cut down pretty quick. If you want to give them everything that you want to give them, you just can't have more than two.
>
> (The husband of this woman was a sanitation worker. He had been unemployed off and on since their marriage.) We'd like four, but there's no way economically we could see it. If we could afford it, we'd have four.

Most of the non-manual workers had ever only wanted -- and ever only considered -- a family of two.

During the interviews, we tried to have the women explain "why" they wanted two children with more than "well, it's a nice number" or "one would get spoilt, so two". We were offered a wide variety of reasons "why" to our probing but perhaps these reasons should be considered with caution. If two is the normal family size then couples may be deciding to have two without any clearly defined reasons. The women planning or undecided about larger families usually could explain the

push and pull factors in their own family size decision making activities, but the women wanting two children would often refer to general societal norms to explain why they wanted two children.

> I just want two. Big families aren't that common now.
>
> It's a good size family. And everybody's having two.
>
> I don't know why I want two. It was just the number I chose as being nice. Most people have two. I think three is practically the most that I know of.
>
> Two is good. Most people I talk to -- and most people when I was in the hospital -- are only going to have two.

However, we did probe beyond these general statements and a number of reasons were offered why the couple had decided on two children. Many women mentioned that they felt two children was all they could afford ("It's what we can afford the way prices are."; "The standard of living nowadays, you can't really afford more than two."). A few (by and large those who had attended university) mentioned over-population ("Two is ideal because I believe in population control."; "My husband is very population conscious and all he would consider is two."). Some mentioned the dislike of pregnancy and delivery ("I hate being pregnant. I just wouldn't want to go through it more than twice."; "I had a really rough time having him and I don't want to go through that again."). Many women mentioned they only wanted two children because they did not think they could handle more than two ("I just know I couldn't handle any more."; "It's what I can handle without feeling terribly over-

run by children. Mentally I don't think I could take more."). Some felt their love might not stretch beyond two children ("With two you can give them more love."; "You can share your love more with two."). Some women did not want to be "tied down" with another baby ("Babies take all your time and I want a life of my own too."; "I want to get back to work and another baby I do not need."). Others did not want to be "tied down" raising another child ("We'd like to travel and we're in a financial position to maybe live six months in Hawaii and six months here. So I don't think we want to be raising a whole raft of kids for fifteen years."; "I still want to be young enough to do things when they've left home. If we have any more we'll be getting up in our mid-forties before they leave home and I don't particularly like that idea."). Some felt they were getting too old to have another child ("The thing is there's three years to me being forty years of age and I don't think you have the patience for it."; "We're both older and we decided two was about all we could handle at this age."). And some felt that with a boy and a girl there was nothing to be gained by having a third ("You have a boy and a girl and what else can you have."; "He has his son and I have my daughter, so why bother with more.").

As we have said, most of these reasons were offered in response to our probing and possibly should be considered with care. However, all were voluntarily offered by the women -- we never asked "what about this" or

"what about that". It seemed that though they may never have thought "why" they wanted two children, they could think of good reasons for two children.

The final observation we made during the qualitative analysis that we wish to discuss here was the impact the family of orientation seemed to play in influencing couples to have, or not to have, more than two children. We commented on this phenomenon when we examined the interviews of those couples wanting more than two children. Here, as there, women would often refer to their own families in their discussions of why they themselves wanted a certain number of children. But, as before, coming from a large and a small family was seen as evidence for having two and only two children. Some women wanted two children because there had been two in their family of orientation.

> We're both from small families and we like small families.
>
> We both come from small families and I think it was just assumed we would have about the same.
>
> We're both from small families and that's all we know.

Others wanted two children because of their experiences in larger families.

> I want two. I reached twenty-four this year. That's forty-two by the time that that one's reached eighteen. That's a time in my life I'd sooner have to myself. Not be like my mother. She's forty-eight and she still has kids at home.
>
> We're both from large families so we want small families. We're both the oldest and we've really both had our fill of kids.

> Two is always what I had wanted. I came from a family of four and I never had any privacy. I never had my own room, by own bedroom. I always shared with my sister and I always wanted to have a small family so they could have a room of their own.
>
> I look at my mom. She had twelve kids and I say no thank you. Two does me fine.

Our conclusion is as it was before; family of orientation does appear to influence a couple's family size decisions but not as a function of number of siblings. It is the couples' experiences in the families they grew up in that is the important factor.

In sum, in this last chapter of the qualitative analysis we have examined our couples' future fertility intentions. We have seen that the range of family sizes that couples are considering is remarkably narrow -- most people wanted more than one child, but less than five. It appears that nobody (with the possible exception of one Catholic and one Mormon couple) was planning to have more children than they believed they could financially and emotionally cope with. "In this day and age", our couples appeared unwilling to "burden" themselves with large numbers of children. Moreover, with the widespread use of contraception that we witnessed amongst our couples, we can realistically expect our couples' future fertility "plans" to be successfully carried out.

Most couples in our sample were planning, for a variety of reasons, on having only the two children. Most had always wanted a small family and could see few

reasons to continue with childbearing, Those couples who were planning (or undecided about) additional children tended to be positively oriented towards large families; however, even these couples had often scaled down the number of children that they had intended in the light of pressures they felt to limit their family sizes. There appeared, throughout the study, to be a shift towards a small -- i.e. two child -- family. As one woman said:

> If you only have one, then it usually turns out spoilt, so you have two. And two you have, I think.

CHAPTER TEN SUMMARY AND CONCLUSIONS

The primary task of this thesis was to examine patterns of family formation -- to consider the ways families in one developed country had been built up and the future fertility changes that were anticipated. A related goal was to remedy the bias we saw in the fertility literature (particularly the literature of the 1960's and early 1970's) towards "economic" interpretations. We felt there was a need for a "sociological" dimension in explanations of fertility behavior; that there were important sociological factors which were being, at best, standardised and, at worse, ignored in the bulk of the available literature.

After considerable deliberation, we decided that close interviewing of a small sample would be our best research strategy. By actually discussing their families with women, we felt we stood the best chance of uncovering the factors that had gone into their family size and spacing decisions. Although most previous fertility studies had been large-scale surveys, we felt that interviewing a smaller sample was more likely to meet our goals. Because of limited resources we confined the sample to one hundred and five women who had just had a second child at a large maternity hospital in Edmonton, Alberta, Canada. These women, we felt, were "typical", easily identifiable and most likely to be able, and willing, to discuss with us their past, present and future fertility-related activities.

The data analysis proceeded along two paths -- a traditional, quantitative analysis and an "interpretive", qualitative analysis. Most previous fertility studies had been limited to quantitative analyses, but we felt a qualitative analysis would add another dimension to our understanding of the couples' behavior. We were initially tempted to proceed with a purely qualitative analysis; however, we felt that we, personally, would have been unable to move beyond generalities if we had done so. The quantitative analysis provided the means by which we could take "explanations (which) consist of chains of reasoning in the actors themselves" (Hawthorn, 1968: 73) beyond mere description.

The theoretical framework we used throughout the thesis was integrative with a dynamic perspective. That is, the influence of both economic and sociological influences was considered on each parity progression. The dependent variable was not, as it traditionally is, total family size, but, rather, the probability of a couple adding another child to their family at the second parity. Also, because we were interested in how families were formed, we had our couples look back and reconstruct the decisions (or lack thereof) that went into having their first and second child. Because we had limited the sample to couples with two children, we were unable to consider the probability of adding a or another child to the family at zero-parity or parity one.

Fertility behavior at each parity progression was conceptualized as working through three factors:

a. the demand for children -- that is, the number of children the couples would have if they had perfect control over their fertility;

b. the potential output of children -- that is, the number of children the couples felt they would have if they had not deliberately controlled their fertility; and

c. the costs of fertility control -- that is, the subjective (or psychic) costs and objective costs that were involved in learning about and using specific contraceptive techniques.

We hypothesized that couples would be motivated to regulate their fertility when their perceived potential output of children was greater than their demand for them. In the chapter on the potential output of children we found that all but one of our couples felt some need for contraception -- that is, they felt that sooner or later they would have more children than they wanted unless they used some method of fertility control. We then went on to hypothesize that though motivation was a necessary condition for a couple to use birth control, it was not a sufficient condition. Birth control itself imposes subjective costs (the displeasure associated with using a technique) and objective costs (the time and money necessary to acquire the knowledge and skill to use specific techniques) on a couple. Whether or not a couple would actually use a contraceptive technique --

and use it successfully -- would depend on their perception of the costs of fertility regulation as opposed to their motivation to limit their fertility. We found, amongst our sample, remarkably high percentages effectively and efficiently using birth control. This, we suggested, could have stemmed from two possible sources -- our sample couples might have been strongly motivated to limit their fertility or they might have been finding the costs of fertility regulation to be very low. With regard to the first suggestion, we could find no evidence to support the idea that our sample couples were any more or less motivated than other couples to limit their fertility. The difference, we felt, between our couples and previous survey couples (who, almost uniformily, have been shown to be using birth control less effectively) had to do with the costs of fertility regulation. It appeared that amongst our sample couples contraception was provided in such a manner that most couples found the subjective and objective costs attached to its use to be very low.

Because of the effective use of contraception, interest became centered on the demand for children. Demand, we hypothesized, was a function of income, prices and tastes. We posited that, at any given point in time, couples had certain tastes which they attempted to maximize subject to the constraints of income and prices. While our conception of the couple's demand for children implied that the couple were rational -- that is, their action was intentional and goal-oriented -- we were not using

the rationality framework associated with the "classical economic man". All our model implied was that, at any given time, couples would have some preferences which they would attempt to satisfy, as best they could, given what they knew about their incomes and the prices of children.

With regard to the timing of the first child, this framework appeared to be relevant for only one sub-section of our sample. We found in the qualitative analysis of the interviews two main themes regarding when a couple should start their family -- one which encouraged delaying the first child (so that the couple could "adjust" to one another) and the other which encouraged having the first child (so that the couple would not resent its "intrusion"). How long each of these stages took, however, varied widely amongst our couples and seemed to stem from the couple's view of marriage and the place of children within it. Three main constellations of ideas seemed to be apparent, only the second of which we felt conformed to the demand framework we had outlined.

The first constellation of ideas held that children were the primary reason for marriage and, thus, once married, it was best to begin the family as quickly as possible. The women who held these views tended to be from the manual social class and, for them, their preference for a child was so strong that their incomes and the costs they saw attached to children were largely irrelevant to the fertility decision making process.

The second constellation of ideas held that children were essential to a "good" marriage, but the first task of a husband and wife was setting up a home and becoming financially established. Women who held these views normally were from the non-manual social class and timed their first child, in most cases, to acquiring a home for themselves. Their behavior was most easily explained by the framework we had outlined -- they appeared to have a set of preferences which included children that they were attempting to satisfy, as best they could, given what they knew about their incomes and the costs of having and raising a family. The final view of marriage and the place of children within it that we were able to isolate in our data held that children added to a marriage but they had to "fit in" with other plans and arrangements the husband and wife had. The couples who felt this way were not characteristically middle or working class and, in most cases, it was the woman's age which prompted them to have their first child when they did. This group appeared to be satisfying their preferences for children as best they could, not with their incomes and the prices of children in mind though, but, rather, other preferences they had which did not include children.

With regard to the timing of the second child, this theoretical framework did not seem applicable to any but a few of our sample couples. Timing to the second child seemed to be influenced mainly be the desire for a specific interval of time between children. When we

asked the women "In your opinion, when should a couple have their second child?" most answered with reference to the first child. There appeared to be two competing considerations -- it was important to have children relatively close so that they could be playmates, but it was important to have some space between them, so that the parents could "cope" and each child could get the attention it deserved. Most women -- regardless of their social class or educational level -- were attempting some balance between these two competing demands and it did not appear that the thought of income or the prices of children entered into the deliberations of most of them in any significant way.

Again, with future fertility intentions, the demand framework we had outlined appeared to be relevant for only a sub-section of our sample. Some couples with inadequate incomes (largely working class, though not entirely) did appear to have certain tastes for children which they were attempting to satisfy as best they could within the constraints of their income and the prices they saw attached to having and rearing children. For many others, though, these were not concerns. Their incomes and the costs they saw attached to having and raising a family did not appear to be acting as "constraints" on their future, intended fertility behavior. Most couples had small enough family-size ideals (and large enough incomes) that to speak about "maximizing tastes subject to the constraints of income and prices" was,

though technically correct, theoretically, not of much use. Most couples did appear to be "maximizing their tastes" for children, but, in most cases, the "constraints" of income and prices were marginal. Because of the marginality of the income-price constraints, it was the influence of the taste variables which accounted for most of the variation in intentions regarding the decision to have or not to have a third child that we found in our sample. A wide variety of taste variables appeared to influence our couples' intentions regarding a third child and we shall conclude the summary of the thesis by presenting a selection of the more important of these in point form.

1. It appeared that sex composition was an important influence on our couples' intentions regarding a third child. Most couples wanted at least one boy and one girl, and, hence, those whose first two children were the same sex were more likely than average to be considering a third child. Couples whose ideal family size was larger than two also showed a greater likelihood of considering a third child.

2. The ability of a woman to "cope" appeared to have an influence on her desires for a third child. Women who were having difficulties coping with their present two children were least likely to be considering a larger family. Related to this taste factor was a factor we termed "antipathy towards children". It seemed that the more a woman did not like children, the less likely she was to be considering a third child. To

what extent these two concepts were related remains open to investigation. Our analysis suggests that the two -- ability to cope and antipathy towards children -- are distinct and both important to fertility decision making.

3. A woman's sex role orientation appeared to influence her intentions regarding a third child. Women with "modern" orientations (which, by our definition, meant they were largely oriented towards the wife's individualistic needs) were less likely to be wanting more than two children than women with "traditional" orientations (which, by our definition, meant they were more oriented towards their children and their husbands).

4. Lastly, the couple's family of orientation seemed to influence their decisions regarding family size; however, not as a function of number of siblings. The relevant variable seemed to be the couples' experiences of, and reactions to, the families they grew up in. Those with happy memories of their families of orientation tended to want as many children as they had had siblings. Conversely, those with unhappy memories of their own families wanted differing numbers of children.

In sum, we hope that in this thesis we have accomplished our related goals -- that is, that we have examined various patterns of family formation in such a way that "sociological" factors have been accredited equal status with "economic" factors. We would conclude,

firstly, that researchers interested in the area of fertility shift their research attention from questions of total family size to considerations of the tempo of fertility. There would appear to be, in developed countries, a tendency toward more homogenous procreative behaviors (more specifically, a shift toward a family composition centered on two children) and this diminishes the need (and interest) for continued studies concentrating only on total or completed family size. Secondly, in considering both total family size and the tempo of fertility, we would conclude that more emphasis be placed on "sociological" factors. From our research experience, it appeared the traditional "economic" model (that is, fertility behavior as a function of a couple weighting their income and the costs they see attached to children against their tastes) was useful in explaining the behavior of only a few of our couples. A model more solely "sociological" (i.e. one which exphasized "sociological" factors, many of which have been standardized or ignored in previous fertility literature) would, we would suggest, be more useful. Lastly, in future research work we would emphasize the benefits of combining a quantitative with a qualitative analysis. Again, from our experience, we found that both contributed a valuable dimension to our "understanding" of our couples' behavior.

APPENDIX A

NOTES

Chapter One

1. In a thought-provoking book published in 1977, Busfield and Paddon (1977: 2-4) made criticisms similar to those of Goldberg's. Demography, they suggested, had "tended to concentrate on producing demographic explanations of demographic phenomena" -- explanations which were "antithetical to the more holistic and social approach" that they argued (and we would agree) is essential for an understanding of any demographic phenomenon. Furthermore, they suggested that when one turned to sociology for help, one found "(little) direct support, since, with the occasional significant exception, sociologists . . . have shown little interest in demographic phenomena". Busfield and Paddon accounted for the lack of sociological interest in childbearing through the development of demography as a separate discipline tied to economics. They concluded their discussion with a statement in the true spirit of our research: "Patterns of marriage and childbearing are just as much family and social phenomena as demographic and economic ones".

2. Goldberg (1975) is, perhaps, overstating his case. There were in the fifties and sixties some modest depth studies conducted by sociologists which we would argue did provide "theoretical excitment and elegance in fertility theory". The two most obvious examples of this are Banks (1954) and Rainwater (1965). Goldberg's basic point, though, remains -- "good" sociological explanations of various aspects of fertility were, by and large, lacking.

3. This division of the "sociological" emphasis into three components was originally suggested by Tien, 1968.

4. Malthus' theory of population has undoubtedly received more attention than Gary Becker's 1960 article. However, on the topic of individual family formation tactics, it is Becker's article which normally begins the debate and hence our decision to begin our survey of the fertility literature with it.

5. Classifying Spengler as a critic demands some clarification in light of the fact that in his presidential address before the American Economic Association, Spengler spoke of Becker's work as a "notable contribution" to the economic analysis of fertility and that in his 1966 paper, Spengler termed Becker's article "excellent". Our point in introducing him here is that though he obviously saw Becker's model as noteworthy, there were aspects of which he was critical. Similar comments could also be made of Duesenberry.

6. Blake's 1968 article most systematically outlines her criticisms of Becker's model. We review this article in light of Namboodiri's (1972a) review of it.

7. The "sociological" exphasis is, as we outlined, composed of a number of different strands. Blake's criticisms that we outline here are basically "normative" criticisms. We proceed with this strand because in this instance we feel it shows most clearly the differences between the "sociological" and the "economic" emphases. The two other strands we mentioned -- the "institutional" and the "interactional" -- were never (as far as we know) used directly to criticise the economic emphasis.

8. For a discussion of the criticisms of Blake's objections to Becker's economic model see, for example, Namboodiri, 1972a.

9. Easterlin's "integration" of the normative and economic approaches grew out of the research work of many others. We are crediting him with the "integration" because his was the first article to pull the findings together into a model. See his 1970 paper for a complete review of the various findings he drew upon.

10. Easterlin himself expanded his analysis of fertility decision making (1975, 1978) to include a variable he termed "production of children" -- that is, "the number of surviving children a household would have if fertility were not deliberately limited" (1975: 55). His basic model, however, remained unchanged. The demand for children was still conceptualized as "depending on the household's balancing of its subjective tastes for goods and children against externally determined constraints of price and income in a way that maximizes its satisfaction" (1975: 55). We discuss his newer theory in greater detail below when we outline our theoretical framework. We do not include a fuller discussion of it in the text at the moment because, although it was expanded, it did not provide any major shift in theoretical direction.

11. Michael Hout (1978) provides a recent discussion of the static versus the dynamic models of marital fertility. Included in this article is a more complete list of research undertaken on the assumption that a long-run equilibrium family size exists. Our discussion of the two perspectives follow his.

12. Again, although we credit Namboodiri with first outlining the dynamic model of marital fertility, we should point out that his work grew out of the work of others. See, for example, Goldberg, 1960 and Mishler and Westoff, 1955.

13. We discuss our dependent variable in greater detail in Chapter Four. The reader is referred there.

14. Our model is superficially similar to Easterlin's; it was, certainly, derived from his. There are, however, basic differences between his model and ours both in the unit of analysis (i.e. the dependent variable) and in the factors demand for children and output of children.

15. The specific income, price and taste variables that we consider in the thesis are outlined in Chapter Four. Briefly, under income, we consider current income, anticipated income flow through time and relative income. Under costs, we consider child-quality standards and indirect costs. Under tastes, we consider size and composition of the ideal family, the conjugal relationship, sex-role norms and behavior and antipathy towards children. Throughout the analysis, social class (measured by husband's occupation), religious affiliation, age at marriage and wife's educational level are used as control variables. The reader is referred to Chapter Four for the complete discussion.

16. Conversely, although we did not consider the premaritally pregnant in any great detail, a number of them voluntarily suggested that they did not use contraception before their first child because they thought "it would never happen" to them -- they saw the chances of their becoming pregnant as very slim. Luker (1975), in her study of women seeking abortion, also found this rational to be common amongst the premaritally pregnant.

Chapter Two

1. The Indianapolis study (Whelpton and Kiser, 1946 - 1958), the Princeton Fertility Study (Westoff, Potter, Sagi and Mishler, 1961; Westoff, Potter and Sagi, 1963), the Michigan Growth of American Families Studies (Freedman, Whelpton and Campbell, 1959; Whelpton, Campbell and Patterson, 1966) and the National Fertility Studies (Ryder and Westoff, 1971; Westoff and Ryder, 1977) could all, in varying degrees, be accused of limiting analysis to correlating independent variables against a dependent variable. A similar criticism could be made about Balakrishnan, Kantner and Allingham's (1975) Canadian fertility survey and Woolf's (1971) British survey of family intentions.

2. For example, all of the studies mentioned above use either ideal, desired or expected family size as their dependent variable. This is so even though none of the surveys limited analysis completely to couples past the reproductive age.

3. The reader is referred to Chapter Four for the complete discussion of static versus dynamic dependent variables.

4. The latest addition to the ongoing National Fertility Studies, Westoff and Ryder's (1977) The Contraceptive Revolution, mentions (finally) this problem (1977: 340 - 341): "We investigate too many areas and, in consequence, fall short of sufficient depth in each".

5. See, for example, Denzin, 1970; Easthope, 1974; and Bulmer, 1977.

6. Kathryn Backett (1977) mentioned this pattern of behavior amongst her sample couples. As she points out, it is very difficult for an individual to sustain a "front" for any length of time in an intense interview situation.

7. The exact percentage of births which the Royal Alexandra Hospital handles is unavailable as all hospitals do not keep -- or at least will not release -- records of the number of children they have delivered. In 1973 (the last year for which official statistics are available), there were 7626 births in Edmonton and 4235 of them were at the Royal Alexandra (55 percent). This percentage could only increase because since 1973 the Royal Alexandra has increased the number of laying-in beds, and set up a perinatal unit (special beds dedicated to the investigation and treatment of high risk obstetrical patients) and a special unit dealing with prematures.

8. As we were collecting the names of suitable couples at the Royal Alexandra Hospital we met a woman who was screening all maternity patients for susceptibility to multiple sclerosis. Since she visited all maternity hospitals and dealt with patients of all parities, we asked her if she felt there was any difference in intake between the three city hospitals. She felt there was no difference between the General and the Royal Alexandra; she confirmed that the University handled mainly first births, and she had found that the Miscericordia dealt primarily with women having their third, fourth or fifth child -- first and second births were relatively rare. She said there was no real reason for this (i.e. it was not an admissions policy) and our suspicion was that by the time couples could afford to live in the catchment area of the Miscericordia, they were well past the early family formation stages. This research worker reassured us that our sample should be representative of all women having second children in the city of Edmonton.

9. We were aiming for a sample size of one hundred because we felt this would be large enough for the requirements of a quantitative analysis and, yet, not so large as to rule out a qualitative analysis. As we go on to suggest, we wanted to combine both types of analysis in our thesis. Our intention also was to spend approximately one year collecting and coding the data and we felt we could handle one hundred cases in this time span. Our actual sample size was one hundred and five because the refusal rate was lower than we had anticipated.

10. The pre-tests were conducted in Edinburgh, Scotland during 1976. The general topic of "family formation" was initially discussed with five women. From these discussions, a questionnaire was developed which was further tested (and revised) on thirty-two women. The questionnaire formulated in Scotland was pretested twice in Canada before the interviewing for the thesis was begun. All of the women in the pretests were similar to the sample women in that all had just had a second child.

11. We perhaps should emphasise that all the respondents knew the tape recorder was on -- if for no other reason than it had to be switched off and on a number of times. The quality of the interview was adversely affected in only two cases and, with hindsight, we probably should have just left the tape recorder off. However, both of these women appeared particularly shy and withdrawn and might well have been reticient regardless of the tape recorder. We should emphasise that the more we were able to draw the respondent into spontaneous conversation, the better the inter-

view was; trying to write down the respondent's attitudes and ideas as well as engage in conversational probing would have been very difficult, if indeed even possible.

12. The results of our quantitative analysis are presented in the form of tables. No tests of significance or measures of association are included, although they were calculated for each table. We felt that with a sample size of one hundred and five, it was not justified to rely solely on these statistical techniques and we felt their inclusion in the thesis would give a degree of "reliability" to the results which may not have been warranted. We referred to the measures of association and tests of significance in our analysis of the data, but always with the realization that we were working with a small sample size.

13. See, for example, Leibow, 1967; Polsky, 1971; Gouldner, 1955; Cicourel, 1968; Whyte, 1955.

14. Dean, Eichhorn and Dean (1967: 301), for instance, suggest analysis should proceed through "the editing of field notes, developing categories for the classification of data, deciding upon the units to be tallied, counting and cross-tabulation, or in some other fashion establishing relations among variables".

Chapter Three

1. The statistical data reported in this section of the thesis are from Statistics Canada, Vital Statistics, Volume I (Births) and Volume II (Marriages and Divorces): 1974, 1975 and 1976.

2. These are, of course, not the only trends that demographers refer to in their examinations of future fertility trends. Rates of abortion, illegitimacy, childlessness and timing and spacing of births from marriage are, for instance, normally examined. Unfortunately, these statistics, for Canada, are not routinely published and hence we could not consider them here. "Therapeutic Abortion" statistics are published annually; however, these are notoriously inaccurate because of the legal status of abortion in Canada. Rates of illegitimacy were published until 1973, but have not been included in more recent summaries. The timing of births from marriage has never, in contrast to the British Registrar General's Reports, been provided by Statistics Canada.

3. We present the demographic data of the family building behavior of our sample without reference to Albertan or Canadian trends because, as we mentioned previously, Statistics Canada does not provide birth statistics cross-tabulated by length of marriage of mother.

4. Not all first pregnancies resulted in live-born children -- some were aborted and others miscarried. Chapter Six discusses this issue in greater detail.

5. This is including only those husbands who were legally wed to their wives when those wives had their first child.

6. One woman's "first child" was twins and hence her second pregnancy yielded her third child. However, to avoid confusion, we have referred to her twins as a single unit.

Chapter Four

1. Bumpass, Rindfuss and Janosik (1978: 76) inadvertently referred to the literature's emphasis on completed family size when they began their article on child spacing with "in contrast to completed fertility, the social determinants of the tempo of fertility have received relatively little attention". Virtually all the fertility studies we have mentioned in previous chapters and notes have concentrated their analyses on determinants of completed fertility. The 1970 National Fertility Study (Westoff and Ryder, 1977: 350) is the first major American study to suggest this emphasis might be changing: "the vast preponderance of attention has been devoted to final parity, and that may be a misplaced emphasis".

2. See, for example, Beaujot, 1975; Krishnan and Krotki, 1976.

3. The reason why "excess children" may want to be excluded from the dependent variable is to take into account Becker's suggestion that differential contraceptive knowledge is the reason for the lack of empirical support for his theory, without using his suggested dependent variable, desired family size.

4. The relationship between social class and wife's age at marriage is seen in the following:

Wife's Age at Marriage	Occupational Categories: Prof.-Man.	Other Non-Manual	Skilled Manual	Unskilled Manual
Under 20	15 %	29 %	50 %	56 %
20, 21	27	23	31	32
Over 21	58	47	19	12
Total N *	26	17	36	25

* The total N equals 104 because one couple had not been legally wed at the time of our interview.

5. These suggestions will be tested more rigorously when we consider our taste variables in a later section of this chapter.

6. The People's Church and the Jehovah Witness did not appear to prohibit the use of birth control (as the Catholic Churches and Mormon religion do); however, these two religions did appear to actively promote large families.

7. We should perhaps emphasise that it was active adherence to denominations which promote large families which appeared to influence fertility intentions and not simply higher levels of religiousity. The relationship between church attendance and future fertility intentions that was apparent for Catholic and Mormon couples was not apparent for Protestant couples.

8. See, for example, Askham, 1975; Beaujot, 1975.

9. Westoff and Ryder (1977: 278), for example, in the latest report of the 1970 National Fertility Study, decided not to include any analysis of occupational differences in fertility because "the classification of occupation by social status is a complex and dubious business, and there seems to be little effect on fertility that is not captured by education and income".

10. See Simon (1969) for a general discussion of the effect of income on fertility. Johnson (1962) discusses differential fertility by income in European countries.

11. The selection of a particular measure depends, of course, on the dependent variable. We simply discuss here the measures that have been used in the previous literature. Most frequently, they have been used when the dependent variable is expected or desired completed family size.

12. We did, in fact, examine the relationship between family income and probability of having a third child and it showed exactly the same pattern of association as the relationship between husband's income and the probability of having a third child. This is perhaps not surprising as many women were not working (see discussion in the taste section of this chapter) and, hence, the correlation between family income and husband's income was very high.

13. Excluding unwanted births would not alter this table, however. At this stage, only two women had more children than they actually wanted. Chapter Seven discusses wanted and unwanted births in more detail.

14. We should point out that Deborah Freedman compared couples of similar age, occupation and education. Since we compared only couples of similar occupation, our results should be interpreted with care.

15. Cell sizes are too small to justify including all these tables. To provide an example of the type of relationship we are referring to, we present the relationship between future fertility intentions and perceived adequacy of income for the skilled manual occupational category.

	Perceived Adequacy of Income		
Future Fertility Intentions	Income More Than Enough	Income Enough	Income Less Than Enough
Probably/Definitely No More Children	75 %	25 %	50 %
Undecided	12	37	50
Probably/Definitely More Children	12	37	0
Total N	8	24	4

16. The relationship between perceived adequacy of income and husband's income is as follows:

	Perceived Adequacy of Income		
Husband's Income	Income More Than Enough	Income Enough	Income Less Than Enough
Under $12,000	0 %	6 %	70 %
$12,000 - $15,000	25	30	20
$15,000 - $20,000	33	44	0
Over $20,000	42	20	10
Total N *	12	73	10

* The total N equals 95 because information could not be obtained from ten women on these questions.

17. This growing realization appears to date from the late 1960's. Blake was one of the first to point out that both direct and indirect costs need to be considered in the analysis of fertility:

> Let us now turn to the costs of children, which Becker believes encourage a positive relation of family-size desires and income. He reaches this conclusion by ignoring <u>indirect</u> costs -- alternative utilities on which parents could expend their resources, and by concentrating on <u>direct</u> costs -- the resources actually expended on childbearing and rearing.
>
> Blake, 1968: 19
> (Emphasis in original)

18. This is, we should emphasise, a taste variable. Because the sets of prices confronting households are likely more or less uniform for all couples, those who spend relatively more per child must do so because of differences in tastes. We continue our discussion of this variable here, rather than in the taste section, because (a) the literature has traditionally been divided in this way and (b) these are tastes concerned with price variables.

19. For instance, Easterlin (1978: 79), who in a 1970 article criticised economists' measurements of opportunity costs, makes the assumption in his latest offering that "there is no uncertainty about the independent variables over the planning horizon. The quality of children and the work/leisure allocation of time are also taken as given . . .".

20. It could also be argued that our scale did not adequately measure child-quality standards because it did not attempt some measure of the "quality" of items considered relevant for children. For instance, two women may both have felt a backyard was important for their children, but one may have been thinking in terms of a small garden and the other in terms of an acre of land. Our scale measured child-quality standards solely as a function of the "quantity" of goods considered essential for children (the more commodities considered very important, the higher the child-quality standards). However, we would suggest that this consideration also be kept in mind by others attempting to measure child-quality standards.

21. As twelve tables were involved in this further analysis, we do not include the data here. However, as has been our practice throughout the thesis (unless stated otherwise), a percentage difference of at least fifteen points must have been present for us to declare that there was a relationship.

22. We should perhaps point out that only a minority of our women felt they might have more children than they wanted because of contraceptive failure. (And with these women there was some confusion about how many children they really did "want"). We would be inclined to doubt that such a high percent of the sample would actually be achieving, and not exceeding, their anticipated family size, except for the fact that many women were being sterilized when they reached their "ideal". Our couples' experiences with birth control are discussed more fully in Chapter Seven.

23. As we go on to mention, one of the distinguishing features of Rainwater's segregated and joint conjugal role relationships was the ability of couples to effectively use contraception. Couples in segregated conjugal relationships were, by and large, less able to effectively plan their families. We do not include a discussion of this variable here because, in our estimation, to do so would be to confuse the "demand for children" factor with the "costs of fertility control" factor. In our theoretical framework (see Chapter One), these are two separate influences on a couple's reproductive behavior. The "costs of fertility control" factor for our sample is discussed in Chapter Seven.

24. The percent of women who assessed the relationship between themselves and their husbands as being very good was 64 percent for the communication variable, 49 percent for the understanding variable, 76 percent for the physical relations variable and 73 percent for the companionship variable.

25. This path is, in fact, the "indirect opportunity costs to the wife" which we discussed in the previous cost section. However, our discussion here will concentrate on the non-economic rewards of female employment -- our previous discussion was in light of the economists' use of the term and emphasised monetary rewards.

26. Grade twelve is the final year of secondary schooling in Canada.

27. The relationship between the wife's age at marriage and the wife's educational level is as follows:

	Wife's Educational Level				
Wife's Age at Marriage	Less Than Grade 12	Grade 12	Short Course	Trade Course	University
Under 20	75 %	48 %	27 %	7 %	18 %
20, 21	10	30	50	29	9
Over 21	15	21	23	64	73
Total N *	20	33	26	14	11

* The total N equals 104 because one couple had not been legally wed at the time of our interview.

28. It is possible that there are simply not that many "working wives" in the population and that we just did not happen to include any in our sample. It is also possible that the "working wives" we did contact did not want to take part in the study because they were too busy with other pursuits. We did meet all potential sample members once, however, and there was no indication from the information we received at this meeting that the refusers were more career oriented than the rest.

29. This is a subjective measure derived during the qualitative analysis. However, all of the university educated women planned to return to work sooner or later whereas approximately 10 percent in each of the other educational categories said they had no intention of ever working again. We have not yet discussed sex role orientation, but, on these scales, the university educated women were also the most likely to show a "modern" orientation.

30. The relationship between the wife's educational level and the husband's occupational level is as follows:

	Wife's Educational Level				
Husband's Occupation	Less Than Grade 12	Grade 12	Short Course	Trade Course	University
Prof.-Managerial	5 %	15 %	23 %	36 %	73 %
Other Non-Manual	5	18	27	7	18
Skilled Manual	45	38	27	50	9
Unskilled Manual	45	29	23	7	0
Total N	20	34	26	14	11

31. This is not to imply that women in the manual social class were more apt to have high antipathy scores. There was, in fact, little difference between the occupational categories in the percent scoring high on the antipathy scale: 36 percent amongst the professional-managerials, 35 percent amongst the other non-manuals, 30 percent amongst the skilled manuals and 42 percent amongst the unskilled manuals. The suggestion is, rather, that working class women live in an environment where children are more apt to be seen as "troublesome" and hence their own attitudes are not considered particularly relevant to the decision regarding a third child.

Chapter Five

1. All the fertility studies we have used for comparison purposes (for instance, Cartwright, 1976; Askham, 1975; Peel and Carr, 1975; Balakrishnan, Kantner and Allingham, 1975) have used the first method of measuring spacing -- that is, the time period studied is the time period ended by the birth of a child. Most of these studies, though, have not concentrated on timing and spacing considerations.

2. Or, alternatively, the couple's attitude towards conception was of the nature "if it happens, it happens". The salient factor was that contraception to avoid pregnancy was not being used and a pregnancy was not "not wanted".

3. See, for instance, Luker (1975) and, in particular, her bibliography (pages 193-204).

4. These findings are supported by the Registrar General's figures for Scotland and England and Wales. For instance, in 1969/70, one-third of teenage brides in England and Wales were pregnant, compared with 16 percent of brides aged 20 - 24. Moreover, 43 percent of all births conceived premaritally in England and Wales in that year were to teenage mothers. See Ineichen, 1976. For Canada, similar trends are outlined in McVey, 1976.

5. Ending the discussion of the relationship between age at marriage and timing to the first birth with a mention of the rate of premarital pregnancies (as Cartwright, 1976 and Peel and Carr, 1975, for instance, do) leaves the reader with the impression that the inefficient use of contraception is a prime explanatory factor. Our argument is that, while it may be important, the explanation needs to be expanded.

6. The percent of women with no religious affiliation was 20 percent amongst those married when they were teenagers, 20 percent amongst those married when they were twenty or twenty-one and 10 percent amongst those married when they were over twenty-one years of age.

7. The relationship between social class and wife's age at marriage for our couples is given in Note 4, Chapter 4.

8. Cartwright claimed (1976: 109) that "both social class and age at marriage are related independently to mothers' views and experiences of the interval between marriage and starting a family"; however, the data she presented followed patterns similar to ours. Social class had much more predictive power

than age at marriage if one wanted to know when a woman felt a couple should begin a family.

9. One could argue that if actual spacing categories were used, then the relationship found by Freedman and Coombs would be clearer. This, however, was not the case. Because so few couples had trouble conceiving and delivering children (see Chapter Six) the two tables -- actual timing and timing to when a child was wanted -- were similar. This is seen in the following table which uses actual spacing categories to the first child.

Husband's Income	8 Months or Less	8 Months- 2 Yrs.	2 Yrs.- 3 Yrs.	3 Yrs.- 4 Yrs.	Over 4 Yrs.
Under $12,000	35 %	0 %	15 %	0 %	0 %
$12,000 - $15,000	39	36	20	14	27
$15,000 - $20,000	9	27	55	71	40
Over $20,000	17	36	10	14	33
Total N *	22	23	19	15	15

* Six women had to be excluded because they were not married to their present spouses when they had their first child and an additional five women had to be excluded because they did not know their husband's income.

10. The relationship between social class and husband's income for our couples is seen in the following:

	Occupational Categories			
Husband's Income	Prof.- Man.	Other Non-Manual	Skilled Manual	Unskilled Manual
Under $12,000	9 %	6 %	6 %	23 %
$12,000 - $15,000	14	35	33	31
$15,000 - $20,000	50	35	30	38
Over $20,000	27	23	30	8
Total N *	22	17	33	26

* The total N equals 98 because information could not be obtained from seven women about their husband's income.

11. We should also point out that Freedman and Coombs measured "general economic position" through current income and accumulation of assets. Our measure was based solely on current income and, thus, should be seen as only a partial measure of Freedman and Coombs' hypothesis.

12. Timing between children and current economic standing showed no relationship and hence the analysis was not included.

13. The relationship between social class and the communication variables is seen in the following:

	Occupational Categories			
	Prof.-Man.	Other Non-Manual	Skilled Manual	Unskilled Manual
Communication				
very good	82 %	71 %	58 %	52 %
okay	18	29	42	48
Understanding				
very good	68 %	43 %	48 %	29 %
okay	32	57	52	71
Physical Relations				
very good	73 %	86 %	80 %	62 %
okay	27	14	20	38
Companionship				
very good	86 %	71 %	68 %	57 %
okay	14	29	32	43
Total N *	24	17	35	25

* The total N equals 101 because four women did not answer all of the communication questions.

14. There was a relationship in our data between social class and wife's educational level (see Note 30, Chapter Four) and to this extent we would predict a relationship between wife's educational level and timing to the first child.

15. Ineichen (1976: 62-63) used similar arguments to account for "why young working-class girls should want to have babies" in his sample of newly married English couples: "It gets them out of dead-end jobs." "It bestows adult status." "Working-class value systems endorse the raising of a family and mark out as deviant (possibly selfish and even unnatural) those who do not marry and have children".

16. Spacing between children showed no relationship by wife's education and thus is not discussed here. Once women began childbearing, their level of education did not appear to influence how they spaced their children. The most popular space was one and a half to two and a half years and this did not vary by how much education the mother had.

Chapter Six

1. Cartwright's (1976: 87-90) was the only study we could find that investigated the possibility that frequency of intercourse influenced the time taken to conceive. She found that the reported frequency of intercourse was clearly related to mother's age and length of marriage. However, when looking at the proportion taking two years or more to conceive, frequency of intercourse in the week before interview did not seem to be related. The effect of age remained, but frequency of intercourse had no influence.

Proportion Taking Two or More Years to Conceive

		Mother's Age		
		20-24	25-29	30 or More
Number of Times Had Intercourse In Week Before Interview	0	7 % (75)	17 % (84)	31 % (67)
	1	2 % (88)	12 % (83)	40 % (43)
	2	4 % (98)	10 % (105)	32 % (41)
	3	9 % (79)	9 % (55)	26 % (27)
	4 or More	5 % (80)	15 % (33)	

(Figures in brackets are the number of mothers on which the percentages are based (= 100 %). Those who became pregnant while taking precautions have been excluded.)

2. This is in contrast to most of the other women who were only too happy to discuss their complete medical history. The chairman of the hospital review board (who approved the study) had suggested that most women would be "anxious" to discuss each pregnancy and delivery to a willing audience and this, in most cases, was true.

3. To repeat, 83.5 percent of the women totally rejected the idea of aborting a pregnancy that they simply "did not want". Some suggested they would consider aborting if their health was in danger or the child was deformed and even percents mentioned that though they themselves would never consider an abortion (or only under extenuating circumstances) they felt that abortion should be a freely available option for others.

4. Eighteen of our couples had been sterilized by the time of our interview and hence were infertile. All of these sterilizations were primarily for contraceptive reasons and are discussed when we consider sub-fecundity due to voluntary factors. To simplify our discussion of the potential output of children we discuss sub-fecundity due to involuntary factors as if none of our couples had been sterilized.

5. We classified these women as sub-fecund from their previous pregnancy history; however, there were three women who, when we interviewed them at eight weeks after the birth of their second child, felt they might be pregnant again. Two of these women were among the "sub-fecund".

Chapter Seven

1. For Britain see Peel, 1972; Askham, 1975. For the United States see Westoff, Potter, Sagi and Mishler, 1961; Campbell and Patterson, 1966.

2. For Britain see Cartwright, 1976; Peel, 1972. For the United States see Westoff and Ryder, 1977. For Canada see Krishnan and Krotki, 1976.

3. For a discussion of this difference in British and American patterns of contraceptive use see Rowntree and Pierce, 1961.

4. The pill became available in Canada in 1960 (Krishnan and Krotki, 1976; Webb, 1978) and all of our couples were married well after that date. In fact, only twelve couples were married before 1970. Age-wise, as well, only five of our women would have been of an age to have possibly needed contraceptives in 1960 (i.e. fifteen or older) and reading these women's interviews gives no indication that they were engaging in sexual behavior at that stage in their lives.

5. For similar groupings see Askham, 1975 and Peel and Carr, 1975. A case could be made for combining the birth control pill and the IUD into one category but, as these are the two most modern contraceptive techniques, we decided to consider them separately. For contraceptive failure rates see, for example, Peel and Potts, 1969.

6. Information on the "main" method of contraception was taken from two questions; the first asked explicitly which methods had been used and for how long and the second asked about the circumstances of getting pregnant (before a method was ever used, while a chance was being taken, when a technique failed, or when contraception was stopped to have a child). This second question was used to confirm information obtained from the first question.

7. There remains <u>medical</u> controversy about the effects of using the birth control pill for long periods of time (see, for example, Webb, 1978); however, many of our women felt there were definite risks involved.

> The pill agrees with me but I wouldn't want to stay on it for too many years.
>
> I thought I'd better go off the pill before something happened to me because I had been on it some time.

8. The average age of all the women in the sample was 25.6. By educational level, the average age was:

Less than grade 12	22.3
Grade 12	25.2
Short Course	25.9
Trade Course	27.4
University	29.8

9. See, for example, Webb, 1978.

10. We have no direct evidence for this other than the large number of women who had been successfully using the birth control pill, but who were switching because they felt frightened of its continued use.

> There's so much controversy over the pill. Whether it's good for you or not. I thought I'd be safe and try that loop.

> I just don't think it's safe to use the pill for that many years. I used it for a year and a half and I figured that was enough. It was time to find something else. With an IUD you can keep it in indefinitely.

11. With regard to the IUD, Webb (1978: 55, 58) writes (and our women agreed):

> When inserted in the uterus by a doctor . . . it usually causes pain . . . it can perforate the uterus and cause injury and infection; shift and permit pregnancy; produce severe cramps, spotting and heavier flow; (and) be rejected by the body.

The birth control pill's side-effects, on the other hand, were listed as:

> Sore breasts and legs, water retention, nausea, depression, anxiety and headaches.

12. There are a number of female sterilization operations available, the most common of which is the tubal ligation. Most of our women did not realize there was this choice, though, and most assumed that they would be having the "tubal". Throughout this chapter we use the term "tubal ligation" or "tubal" to refer to all varieties of female sterilization.

13. The relationship between social class and husband's income for our couples is given in Note 10, Chapter Five. The relationship between social class and wife's educational level is given in Note 30, Chapter Four.

14. Medical evidence suggests (see, for example, Taylor, 1976) that the incidence of congenital malformations is considerably higher in infants born to mothers at the upper end of the reproductive age span. Many of our women mentioned that they wanted their children when they were "young" because they felt the risks of child deformity were greater at the older ages and because they felt pregnancy and delivery would be more difficult then.

15. For Britain see, for example, Askham, 1975; Cartwright, 1976; Woolf, 1971. For the United States see, for example, Westoff and Ryder, 1977; Ryder and Westoff, 1971; Westoff, Potter, Sagi and Mishler, 1961; Westoff, Potter and Sagi, 1963; Bumpass and Westoff, 1970; Rainwater, 1965.

16. See Webb, 1978. In the 1968 Toronto study (Balakrishnan, Kantner and Allingham, 1975), sterilization as a birth control technique was so rare that it was not included in the list of contraceptive techniques. Furthermore, the researchers did not ask those couples who had had an operation which made another pregnancy impossible why they had had the operation.

17. According to Table 7.3, 85 percent of the sample women are planning on some form of sterilization in the future. However, this table excludes the thirteen women who were undecided about their future contraceptive plans. If they are included, then 75 percent of the sample are planning to be sterilized in the future.

18. The women from the manual social class may have had more reason to be concerned about eventual divorce. They were less apt to report a very good relationship with their husbands on three of the four husband-wife communication indices (see Note 13, Chapter Five). Furthermore, they were more apt to have been married when they were under twenty (52 percent in the semi- and unskilled occupational category and 50 percent in the skilled manual group versus 9 percent in the professional-managerial category and 36 percent in the other non-manual group) and Vital Statistics for Canada show that wife's age at marriage has an important impact on eventual divorce.

	Divorces Per 1000 Marriages		
Age of Wife at Marriage	1974	1975	1976
Under 20	365.43	434.08	501.23
20 - 24	194.70	219.81	260.40
25 - 29	142.72	154.20	168.60
30 +	100.43	109.25	122.12

19. Aberdeen is also a unique city; it has for many years followed a liberal policy of sterilization, abortion and the provision of birth control. See, for example, Askham, 1975.

20. This "planning" category appeared to have been present in Rainwater's data (1965:202), although he did not make special mention of it:

> . . . they may occasionally joke about the child that was a "martini" baby, conceived when one partner felt like taking a chance . . . (but) one gets the impression that the chance was taken in most cases to solve by fiat ambivalence over whether or not to have another child.
>
> Rainwater, 1965: 202

Most recently, Woodward, Heath and Chisholm discuss (1978: 43) the " 'grey area' between definitely planned and definitely unplanned conceptions".

21. Luker suggests (1975) such a dichotomy might be useful to account for the high percent of her abortion seeking women who had been using the birth control pill around the time they conceived.

Chapter Eight

1. We would argue that these themes or ideas are not "equally distributed" throughout the childbearing population -- a working class girl, for instance, may want children for entirely different reasons than a thirty year old working woman. Busfield and Paddon (1977) did not attempt to systematise their data in this way (one of the criticisms we have of their book) and we did not feel that we had sufficient data to attempt to do so. We present their ideas and themes underlying the "automatic assumption" regarding children because these were often echoed in our data and seemed a logical "first step" in our discussion of patterns of family formation.

2. We may not be able to generalise to all of the population; however, the percent of couples who remain childless (voluntarily and involuntarily) in Canada has been and remains very small (see McVey, 1976).

3. This is, incidentally, a very good reason why questions such as Cartwright's (1976: 36-37) which ask whether a woman favours starting a family "straight away" or "leaving it for awhile" can be misleading. The majority of our women (as Cartwright's did) would likely say "leave it awhile" but "awhile" would have ranged from one month to three years or more.

4. Again we ignore the previous literature, mainly because we could find none which we felt contributed to our discussion. The exception would be Busfield and Paddon's (1977: 157) comments concerning the Ipswich couples:

> Two ideas dominated the accounts of the preferences about the spacing of births: one that encouraged a relatively close spacing of births, the other a more distant one. Neither show any concern with economic considerations. On the one hand with what they think is good for children in mind, people argue that births should be relatively close so that the children can grow up together; on the other hand with their ability to look after and care for their children in view, they argue that the births should not be too close to make it easier for the parents to cope with the work that a baby involves. Many people mentioned both points and were clearly attempting some balancing between them.
>
> Busfield and Paddon, 1977: 157 (Emphasis added)

Our qualitative analysis was completed before we received the Busfield and Paddon book, however, it sounds as if the trends we observed are present in more than our sample.

Chapter Nine

1. See, for instance, Westoff and Ryder (1977: 306), Busfield and Paddon (1977: 9-14) and Cartwright (1976: 22-25).

2. In Canada, for instance, the average family size estimated circa 1800 was 5.7. By 1971 the average family size had declined to 3.7 (including both parents) and there is evidence that this has fallen even further in recent years. See McVey, 1976.

3. It was also the case that the few couples who wanted more than two children and who earned below average incomes wanted to wait before having their third child.

4. There do appear to be two interconnected ideas here -- whether one is willing to cope versus whether one can cope. Some women felt they could not cope with more than three or four children, while others suggested they were not willing to cope with more than three or four. As we have commented on before, we did not decide to consider "coping" in any great detail until the interviewing was half finished and, hence, we did not feel we had enough data to differentiate clearly between these two concepts. In the discussions we have, many women appeared to be referring to both ideas: they could not, and would not, consider more than three or four children.

5. Here, again, there appear to be two interrelated ideas, but, as above, we discuss them together.

APPENDIX B

THE QUESTIONNAIRE

All of these questions were covered, but their order was flexible. That is, we interviewed from the basis of the questionnaire, but allowed respondents to direct the conversation along their own lines. Included in this questionnaire are six sets of attitudinal statements. Their ordering is approximate; we introduced them whenever a natural pause seemed to develop.

A. Marriage

1. How old were you and your husband when you married?
2. How long had you known each other?
3. How had you met?
4. What type of wedding did you have?

B. Family Size Intentions

1. When you got married, did you feel you would like to have children sometime? If yes: At that time, how many children did you want in all? (If not premaritally pregnant:) And when did you think you wanted your first child?
2. At about the time of your marriage, did you discuss with your husband whether you wanted children? If yes: How many children did your husband want then? (If not premaritally pregnant:) And when did he want to have the first child?

3. After you had just had your first child (say three months after), did you feel you would like to have more children sometime? If yes: At that time, how many children did you want in all? And when did you think you wanted your second child?

4. After you had just had your first child, did you discuss with your husband whether you wanted more children? If yes: How many children did he want then, do you think? (If more than one:) And when did he want to have the next child?

5. If you and your husband wanted more children, could you, from a medical point of view, have them? If yes: Do you think you could easily have another child or would it be difficult or impossible? If difficult, what makes you think this?

6. Do you feel you would like to have more children sometime now? If yes: How many children do you want in all now?

7. Have you discussed with your husband since having the second baby whether you want more children? If yes: How many children do you think your husband wants now?

C. Husband and Wife Role Scales

Now here are some statements about husbands and wives. I would like you to check whether you strongly agree, agree, disagree, or strongly disagree with the statements. If you are undecided, check between agree and disagree.

1. Wife Role Scales

i. A married woman's most important task in life should be taking care of her husband and children.

ii. She should realize that a woman's greatest reward and satisfaction come through her children.

iii. Having a job herself should be just as important as encouraging her husband in his job.

iv. If she works, she should <u>not</u> try to get ahead in the same way that a man does.

v. She should be able to make long-range plans for her occupation, in the same way that her husband does for his.

vi. A wife should <u>not</u> have equal authority with her husband in making decisions.

vii. If she has the same job as a man who has to support his family, she should not expect the same pay.

viii. If being a wife and mother isn't satisfying enough, she should take a job.

ix. There should be more day-care centers and nursery schools so that more young mothers could work.

x. A wife should realize that, just as a woman is not suited for heavy physical work, there are also other kinds of jobs she is not suited for, because of her mental and emotional nature.

xi. A wife should give up her job whenever it inconveniences her husband and children.

xii. If a mother of young children works, it should be only while the family needs the money.

2. Husband Role Scales

i. A married man's chief responsibility should be his job.

ii. If his wife works, he should share equally in household chores such as cooking, cleaning, and washing.

iii. If his wife works, he should share equally in the responsibilities of childcare.

iv. If her job sometimes requires her to be away from home overnight, this should not bother him.

v. If a child gets sick and his wife works, he should be just as willing as she to stay home from work and take care of the child.

vi. If his wife makes more money than he does, this should not bother him.

vii. The husband should be the head of the family.

viii. On the job, men should be willing to work for women supervisors.

ix. A married man should be willing to have a smaller family, so that his wife can work if she wants to.

D. "Ideal" Family

1. Thinking about couples more or less like yourself, what do you think is the ideal number of children

for them to have nowadays? Why?

2. How many children would couples like yourself have to have before you would say there were too many children?

3. What do you think is the ideal number of children for a couple in this country nowadays, supposing they had no particular worries about money or anything like that?

4. Some couples want a certain minimum number of boys or girls. For example, they continue to have children until they have a son or daughter. Would you continue to have children until you had at least one boy? At least one girl?

5. In your opinion, if a couple had complete control over their fertility, how many months or years should there be between getting married and having a first baby? Why?

6. How many months and years should there be ideally between the first and second child? Why?

E. Task Performance

I would now like to ask you some questions on how you organize things at home. Here is a list of tasks and I would like you to tell me whether the husband always does this task; the husband usually does it, but sometimes the wife will; both husband and wife will carry out the task together; sometimes the wife, sometimes the husband; the wife usually, but sometimes the husband will; or finally, the wife always does this task.

1. grocery shopping
2. repairing minor things around the house
3. getting breakfast for the children
4. keeping track of the money and bills
5. washing the evening dishes
6. taking out the garbage
7. putting the children to bed
8. paying the rent
9. tidying up the house
10. getting things from the attic or basement
11. disciplining the children
12. handling financial affairs at the bank
13. preparing the evening meal
14. the family's laundry
15. getting up with the children at night
16. dealing with the mortgage company (or landlord)

F. Decision Making

Now I would like to ask you some questions on how your family makes decisions. Again the response categories are across the top and the decisions down the side. The response categories here are husband always; the husband usually but sometimes the wife; the husband and wife together; the wife usually but sometimes the husband; or the wife always. I am sure you will have discussed most things that I mention with your spouse, but what I am interested in is, after you have discussed the issue, who actually makes the decision.

1. Which house or apartment to take?
2. Where to go on vacation?
3. How much money should be spent on the children?
4. What job the husband should have?
5. Whether or not to buy life insurance?
6. Which friends are seen the most often?
7. What the child should be allowed to do?
8. How much money the family can afford to spend per week on food?
9. Whether the wife should work?
10. How often they should go out together for an evening?
11. At what time the children should be sent to bed?
12. How much money should be spent on major purchases?
13. What television (or radio) programnes to watch?
14. How the children will be disciplined?

G. Probability of Third Child

1. You now have had two children. Would you say you will definitely have more children, you probably will have more children, you're uncertain, you probably will not have more children or you definitely will not have any more?

   i. Uncertain: Are you uncertain because you may change your mind later on or because you may have children you haven't planned on?

   ii. Probably Will, Probably Will Not, Uncertain: What would push you towards having another child? What would push you away from having another child?

iii. Definitely Will Not: Can you think of anything that would make you change your mind and have more children?

iv. Probably Will, Definitely Will: How many more children do you think you will have? Does the number depend on whether you have children of the sex you want? When do you think you will have your next child? Why then?

v. Probably Will Not, Uncertain: If you do decide to have more children, how many more do you think you will have? Would that number depend on whether you have children of the sex you want? When do you think you would have that child? Why then?

2. What do you think will be the largest number of children you will have altogether (counting those you have now).

3. And what do you think will be the smallest number of children you will have altogether (counting those you have now).

4. How certain are you that you will have this number of children -- very sure, fairly sure, or not too sure? If fairly or not too sure: Are you not very sure because you may change your mind later on, or because you may have children you have not planned on?

H. Maternal Role Scale

The next set of statements are questions people have raised about a mother's role. I would like you to

check whether you definitely would say yes to the question, probably say yes, probably say no to the question or definitely say no to it.

1. Do you believe that the institution of marriage and and family was established by God?
2. Do you feel that being a mother is a special calling from God?
3. Do you think that a working mother can establish just as warm and secure a relationship with her children as a mother who does not work?
4. Do you feel that a parent gets more satisfaction when a son gets ahead in his occupation than when a daughter gets ahead in hers?
5. Do you feel a marriage is incomplete without children?
6. Do you think that young girls should be permitted as much independence as boys?
7. Do you feel a pre-school child is likely to suffer if the mother works?

I. Companionship

Also on that sheet are some questions on the companionship between you and your husband at the moment. Would you also please answer those questions by checking the appropriate response.

1. How do you feel about the ways you and your husband can confide in each other, talk things over and discuss anything that comes up? Do you feel it is very good, okay or not so good?

2. How do you feel about the way your husband understands your problems and feelings? Do you feel his understanding is very good, okay or not so good?
3. How do you feel about the physical love and sex relations you experience with your husband? Do you feel it is very good, okay or not so good?
4. How do you feel about the companionship that you and your husband have in doing things together? Do you feel the companionship is very good, okay or not so good?

J. Childlessness

1. What would be your reaction to a couple who decided not to have any children in their marriage?
2. Do you have any friends who have decided not to have any children?

K. Occupational Behavior

1. Did you work between getting married and having your first child? If Yes: Doing what? What hours? When did you finish that job? If No: Did you work before you were married? Doing what?
2. Was your husband working at that time? If Yes: Doing what? Did he change employment at all? Why? If No: Was he looking for work? As what?
3. Did having your first child when you did mean a substantial reduction in your standard of living, a slight reduction or did that child not change your standard of living at all.

4. Between your first and second child, did you work at all? If Yes: What did you do? Hours? What was your main reason for working at that time? When did you finish that job? If No: Did you consider working? If so, what prevented you from working at that time?

5. And was your husband working then? If Yes: Doing what? Did he change jobs at all? If so, why? If No: Was he looking for work?

6. Has having your second child meant a substantial reduction in your standard of living, a slight reduction in your standard of living or has this child not changed your present standard of living in any major way?

7. Are you working now? If Yes: Doing what? Hours? What is your main reason for working at the moment? Would you prefer not to be working at the moment? If No: Are you looking for work? If so, what sort? Hours? What is your main reason for wanting to work? Would you prefer not to be considering work at the moment? If not, would you like to be working at the moment? If so, what prevents you from working?

   i. Not Working: Do you think you will be working five years from now? Twelve years from now? Twenty years from now? If yes to any: What sort of work do you think you will be doing? What hours will you work? What will be your

main reason for working?

ii. Working and Seeking Work: Do you think you will be doing the same kind of work with the same hours in five years time? Twelve years time? Twenty years time? For each change: What do you think you will be doing? If working, what type of work and hours? What will your main reason for working be then? If no changes, what will be your main reason for working in twenty years time?

8. Is your husband working now? If No: Is he looking for work? As what? If Yes: Doing what? Hours? Do you feel this job is quite secure? Does he have any plans to change? If so, to what? Why?

L. Present Income

1. How would you rate your family income at the moment? Would you say it was enough for your needs, more than enough or less than what you really need?
2. Suppose your husband lost his job tomorrow and neither you nor he could manage to find work for one month. Do you feel you could pay all your usual bills for that month out of your family savings? Two months? Three months?
3. In about five years time, do you think your family's standard of living will go up a great deal, go up slightly, be about the same or be worse than it is now?

4. How would you compare yourself, financially, with your friends? Would you say you are slightly better off than they are, about the same, or worse off, financially, than most of them are?

5. And how would you compare yourself, financially, with families where the husband has the same kind of job as your husband?

M. Childcare

1. For Women Working Full-Time or Part-Time:

   i. Who looks after the children while you are at work?

   ii. Do you pay for this service?

   iii. Are you happy with this service?

   iv. Do you think you are easily earning enough to offset the costs of employment (better clothes, transport), you are just about breaking even, or you are not earning as much as it is costing you to work?

2. For Women Not Working:

   i. Say you wanted to go back to work at the moment, do you think you could easily find employment suitable for your education and qualifications, you likely could if you looked hard enough or do you think you would find it very difficult to find suitable employment?

   ii. And how about suitable day-care or babysitters for your children? Could you easily find a reliable person, you could if you looked hard

enough or it would be very difficult?

iii. Would you, do you think, have to pay for this service?

iv. Say you were working, do you think you could earn enough to offset the costs of employment, you would just about break even or you would not earn enough to cover your costs?

N. Timing of Pregnancies

1. For each pregnancy: Apart from what you feel now, looking back to the time you found out you were pregnant, at that time would you rather it had happened a bit earlier, a bit later, were you happy with that timing or were you sorry it happened at all? If earlier or later, when would you have liked that pregnancy? Why then?

2. From your experience now, how would you change the timing of your two children? If any changes, why?

O. Abortion

1. Say you found out you were pregnant now. Would having another baby right now present you and your husband with any major problems? Would you consider termination?

2. Say you became unintentionally pregnant in two or three years time, would you consider termination then? Under which, if any, circumstances would you consider termination?

P. Importance of Commodities

Different people have different ideas about how important a child's physical surroundings are. Will you please look at this card and tell me, on the whole, whether you think it is very important, important or not essential for a child to have the things I will mention. By very important, I mean so important that you really wouldn't have a child unless you could provide it with this commodity. By important, I mean you feel it would be nice to provide your child with this commodity and you will try to do so. By not essential, I mean that you really feel that the commodity is just not important for your child.

1. The majority of his or her clothes new for them, rather than ones handed down.
2. A separate bedroom for each child when they were teenagers.
3. A nice (that is, physically pleasing) home for inviting friends around.
4. Toys like those of children he plays with.
5. A backgarden of their own where they can play.
6. A summer holiday away from home every year.

Q. Antipathy to Children Scale

Also on that sheet of paper are some statements men and women have made about families and children. I would like you to check whether, on the whole, you feel the same way or not.

1. Given the choice, most women would not be without children.
2. Women only have babies because they feel they ought to have babies.
3. People will have to stop having large families because we are over-populated.
4. Children are selfish; it's all give and no take having children.
5. When children grow up, there will be so many people, it will be difficult to get jobs.
6. Children get on your nerves most of the time.
7. Most women find motherhood satisfying.
8. These days, schools are over-crowded because too many children are being born.
9. Children tie you down too much.

R. Leisure Activities

1. Thinking about your husband's friends, do you know most of them quite well, some of them or do you not know many of your husband's friends? How often does your husband go out with his friends and without you? What sorts of things does your husband do with his leisure?
2. Thinking about your friends, does your husband know most of them quite well, some of them or not too many of your friends? How often do you go out with your friends and without your husband? What sorts of things do you do with your leisure?

3. Now how about friends other than relatives. During the past two weeks, how many times did you and your husband get together with friends -- I mean things like going out together or visiting in one another's houses? Has this been a typical two week period, and if not, about how often would you and your husband go out with friends?

4. Thinking of visits, phone calls and letters, which (if any) of your and your husband's relatives were you in touch with during the past two weeks? Which of these do you and your husband see or visit regularly -- say at least every week?

S. Contraception

1. Now a few questions about contraception. Many married couples do something to limit the size of their families. At the time of your marriage, did you discuss the question of contraception? If Yes: By discuss, do you mean that one or the other said I'll take care or did you go through the pro's and con's of the various methods and then choose one?

2. Here is a card* of various methods of birth control. Did you or your husband use any of these methods before your first pregnancy? If Yes: Which methods? (For each change) Why did you change from x to y? Did you and your husband use this method always or were there times you took chances? If No: Was it because you wanted a child straight away, you didn't mind having a child straight away, or some other reason?

3. Also on that card* are various conditions under which a pregnancy can occur. Could you please tell me under which of those circumstances your first pregnancy occurred. Also, how long would you estimate it took you to get pregnant?

4. Between your first and second pregnancies, did you use any method of contraception? If Yes: Which methods? (For each change) Why did you change from x to y? Did you and your husband use this method always or were there times you took chances? If No: Was it because you wanted a child straight away, or some other reason? (Continue to ask for each pregnancy interval.)

5. Under what circumstances did your second pregnancy occur? How long did it take to get pregnant? (And ask for each pregnancy interval.)

6. Since your second child has been born, have you used any method of birth control? If Yes: Which method? At the moment, do you and your husband always use a method or do you sometimes take a chance? Do you think you will continue using this method? Specify any changes and reasons for changes. Are you happy with this method? Are there any disadvantages? If No: Have you and your husband resumed sexual relations again? If yes, what are the main reasons why you are not taking precaution? Do you think you will use some form of birth control in the future? Which methods and when?

7. Have you ever discussed sterilization with your husband? Would you ever consider sterilization? Would your husband? If so, when and for whom? For those sterilized: When and why did you decide to have this operation?

T. Reasons for Pregnancies

1. If first child planned: Why did you and your husband decide to have your first pregnancy when you did? Why not earlier? Why not later? Often a husband or wife will decide the right time has come to start their family -- both will discuss it, but it was initially one or the other's idea. In your case, who decided to have the first child?
2. If second child planned: Why did you decide to have your second child when you did? Why not earlier? Why not later? And who decided to have this child?

U. Powerlessness Scale

I now have a number of statements about the future. I would like you to check whether you strongly agree, agree, disagree, or strongly disagree with the statements.

1. I worry about the future facing children these days.
2. Sometimes I have the feeling that other people are using me.
3. Being responsible for the development of a little child frightens me.
4. There is little or nothing I can do toward preventing a world war.

5. There are so many decisions that have to be made today that sometimes I could just scream.
6. There is little chance to get ahead in life unless a person gets a break.
7. The future looks very dreary.

V. Background Factors

1. What was the highest grade or year of elementary or secondary school you (and your husband) attended?
2. How many years of schooling have you (and your husband) received since then?
3. When you were growing up, how many brothers and sisters did you have living with you? And where were you in the family? How about your husband?
4. What was your father's (and your husband's father's) occupation when you were growing up?
5. Which religious denomination, if any, do you (and your husband) belong to?
6. Do you (does your husband) attend religious services? If so, how often?
7. To which ethnic or cultural group did your (and your husband's) father belong to on coming to this continent?
8. What language do you speak in your home now?
9. In what other languages can you (and your husband) converse?
10. Do you and your husband own or rent this house/apartment/mobile home? How many bedrooms does it have? Have you any intentions of moving in the future? If so, why?

11. Do you presently own a washing machine and tumble dryer? A car for husband and wife? Colour television? A freezer?

12. On this card is a number of income groups. Could you please circle the letter of the group into which your husband's income from all sources before tax would fall in 1976. And would you just tell me the letter of the group which would apply to your income before taxes in 1976.

a. Under $2,000
b. $2,000 - $2,999
c. $3,000 - $3,999
d. $4,000 - $4,999
e. $5,000 - $5,999
f. $6,000 - $6,999
g. $7,000 - $7,999
h. $8,000 - $9,999
i. $10,000 - $11,999
j. $12,000 - $14,999
k. $15,000 - $17,499
l. $17,500 - $19,999
m. $20,000 - $22,499
n. $22,500 - $24,999
o. $25,000 - $29,999
p. $30,000 - $34,999
q. $35,000 and over

*Methods of contraception:

1. Safe period - rhythm method
2. Husband withdraws
3. Douching - washing within one hour
4. Complete abstinence from marital relations
5. Husband uses sheath - rubber - condom
6. Loop - coil - intra-uterine device - IUD
7. Cap - Diaphragm with jelly or cream
8. Cap - Diaphragm by itself
9. Jelly or cream by itself
10. Suppositories - pessaries - foam tablets
11. Aerosol foam - Emko
12. Pill - contraceptive pill - birth control pill
13. Other (please specify)

*Circumstances of becoming pregnant:

1. Before you and your husband ever started using a method.
2. While you were actually using some method and didn't want a pregnancy just then.
3. When you took a chance and didn't use a method.
4. After you deliberately stopped using a method in order to have a child.
5. Some other circumstance (please specify).

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